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H. FOSTER BAIN DIRECTOR

ANALYSES OF SAMPLES OF
DELIVERED COAL

COLLECTED FROM JULY 1, 1915
TO JANUARY 1, 1922

WITH A CHAPTER ON
THE TIDEWATER POOL CLASSIFICATIONS

BY

NED H. SNYDER



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ANALYSES OF SAMPLES OF DELIVERED COAL COLLECTED FROM JULY 1, 1915 TO JANUARY 1, 1922, WITH A CHAPTER ON THE TIDEWATER POOL CLASSIFICATIONS.

By NED H. SNYDER.

INTRODUCTION.

ADVANTAGES OF PURCHASE UNDER SPECIFICATIONS.

In recent years the Government and other large consumers of coal have appreciated more and more the desirability of definitely determining by chemical analysis and test the character and quality of the coal they purchase. Higher prices for coal point forcibly to the need of giving more study to engine room and boiler room efficiencies and economies; this implies an intimate knowledge of the character and quality of the fuel used. Analyses and tests of delivered coal furnish data whereby power plant results can be comprehensively studied and a continuous check maintained on the coal and on the conditions of plant operation.

Under authority of acts of Congress making appropriations for technologic investigation of fuels and the analyzing and testing of fuels belonging to or for the use of the United States Government, a laboratory is maintained at the Pittsburgh station of the Bureau of Mines, where samples representing deliveries of coal purchased for Government use are analyzed and tested.

The Bureau of Mines has been active in promoting the purchase of coal by the Government under specifications,¹ that is, by contracts that make definite requirements regarding the heating value of the coal, expressed in British thermal units, and the composition as shown by proximate analysis. Under many of these specification contracts the bidders guarantee the quality of the coal offered, and that guaranteed by the successful bidder becomes the standard of his contract. The deliveries are sampled and analyzed to determine whether the coal is of the quality guaranteed by the contractor, and if it is not, the price to be paid is decreased in proportion; but if the coal is of higher quality, the price is proportionately increased.

¹ For types of specifications and methods of sampling, see Pope, G. S., Methods of sampling delivered coal and specifications for the purchase of coal for the Government; Bull. 116, Bureau of Mines, 1916, 64 pp.; Pope, G. S., Directions for sampling coal for shipment or delivery, Tech. Paper 133, Bureau of Mines, 1917, 15 pp.

The known analyses of coals or the guaranteed analyses offered by the bidders may sometimes be used for determining the award of a contract, but if the coals offered differ widely in characteristics, it may be difficult to determine which would prove the cheapest fuel without data on their relative evaporative efficiencies. Hence, the making of evaporative tests under service conditions may be necessary in order to determine which coal is particularly adapted for successful and economical use in a certain plant. Once a particular coal is selected, however, regardless of the procedure of determining the award of a contract, then the greatest advantage of the specification method is realized, for it guarantees the purchaser receiving coal of uniform character and quality, thereby insuring the best results in the plant.

The success of the specification method for the purchase of coal and the reliability of analysis now rests largely on sampling.² Improper sampling leads to controversies, with resulting condemnation of the specification method in general and of the value of laboratory analyses and tests in particular.

METHOD OF SAMPLING DELIVERIES.

In sampling delivered coal the Bureau of Mines follows a definite procedure. A sample of not less than 1,000 pounds is systematically collected by taking equal increments at regular intervals throughout the delivery, while coal is being loaded or unloaded, and crushing and reducing this gross sample by successive stages to a sample of laboratory size.

VALUE OF ANALYSES.

In using analyses of samples of delivered coal it must be recognized that the coal is not always of uniform size and that the impurities are not uniformly distributed throughout the mass. Results, therefore, will vary somewhat, and even though the same mass of coal be sampled a number of times, the analyses will not agree absolutely except by chance. It is only when a large number of analyses representing a considerable tonnage mined over a period of time are available that the average value and range of variation of a particular coal become known with assurance. With reasonable tolerances for these variations, delivered coal can be sampled accurately enough for all practical purposes. Delivered coal from any given mine may vary from day to day, due to variations in mining or preparing the coal; hence a record of analyses of delivered coal for any one time should not be considered as a permanent record, for the output may be greatly improved by the use of new methods at the mine or, on the other hand, it may deteriorate through carelessness in mining and preparation.

² Pope, G. S. Works cited.

The analyses given in this bulletin are of samples of delivered coal. Such analyses should not be compared with analyses of samples collected from the face of the bed in the mine unless due allowance is made for the different results obtained by the two methods of sampling. It is difficult to take a mine sample in which the impurities are rejected in exactly the same way as that followed by the miner. The practice of different miners varies, especially if rigid inspection at the tippie is not enforced. In some mines, too, where the coal bed has friable partings or has a soft, flaky roof or floor, the inclusion of some foreign matter is unavoidable. Hence the analysis of the mine sample usually indicates a better grade of coal, as to ash content and heating value, than the actual commercial shipments, and for this reason the mine sample should be considered as representing the coal than can be produced under only the most favorable conditions of mining and preparation.

In commercial shipments that are sampled at their destination the moisture content may be either more or less than that in the mine samples, the relative proportions depending on the amount of moisture in the bed, the size of the coal, and the weather conditions during transit. Records of delivered coal indicate more nearly what the consumer is likely to receive, but careful consideration must be given to the amount of coal represented by the samples and to the number of analyses made.

This bulletin gives the results of analyses of samples of delivered coal collected from July 1, 1915, to January 1, 1922. It should be used in connection with Bulletin 119³ covering analyses of samples of delivered coal during the fiscal years 1908-1915. A number of bulletins⁴ containing analyses of delivered coal were published previously, but the analyses they gave were included in Bulletin 119.

ACKNOWLEDGMENTS.

The data presented in this bulletin were compiled by the fuel inspection section of the bureau, which is under the general supervision of O. P. Hood, chief mechanical engineer, with the writer in immediate charge of the section. Prior to the fiscal year 1920 the section was in charge of George S. Pope, engineer. The work of the section includes the sampling, analyzing, and testing of delivered

³ Pope, G. S., *Analyses of coal purchased by the Government during the fiscal years 1908-1915*: Bull. 119, Bureau of Mines, 1916, 118 pp.

⁴ Randall, D. T., *The purchase of coal under Government and commercial specifications on the basis of its heating value, with analyses of coal delivered under Government contracts*: U. S. Geol. Survey Bull. 339, 1908, 27 pp.; Burrows, J. S., *Results of purchasing coal under Government specifications*: U. S. Geol. Survey Bull. 378, 1909, 44 pp.; Pope, G. S., *The purchase of coal by the Government under specifications, with analyses of coal delivered for the fiscal year 1908-9*: Bull. 11, Bureau of Mines (reprint of U. S. Geol. Survey Bull. 428), 80 pp.; Pope, G. S., *Government coal purchases under specifications, with analyses for the fiscal year 1909-10, with a chapter on the fuel-inspection laboratory of the Bureau of Mines*, by J. D. Davis: Bull. 41, Bureau of Mines, 1912, 97 pp.

coal as purchased by the Government or as required in connection with other technologic investigations. Assistance was rendered in the collection of samples and compilation of data by H. A. Goodman, F. P. Jenkins, and R. J. Swingle, fuel inspectors. A number of inspectors and samplers were also employed for short periods as required by the work. The analyses of samples were made at the bureau's laboratory under the direction of H. M. Cooper, chemist in charge, assisted by a corps of chemists and laboratory aids. Acknowledgment is also due J. A. Cox for efficient clerical work.

TABULATED ANALYSES.

Table No. 1 gives the following data:

1. The yearly average analyses of coal delivered for Government use during the fiscal years 1916-1921. The samples analyzed were collected systematically throughout the entire deliveries by representatives of the various Government departments under directions furnished by the Bureau of Mines.

2. The analyses of samples collected by samplers of the Bureau of Mines as coal was being loaded into railroad cars at the mine tippie during the period from July 1, 1915, to January 1, 1922. These samples were collected systematically through an entire day's run at the mines.

3. The analyses of samples collected by samplers of the Bureau of Mines at tidewater shipping piers as coal was being loaded into vessels. These samples were collected systematically from 4 to 15 railroad cars.

4. The analyses of samples collected by samplers of the Bureau of Mines at the Sewalls Point sampling plant. Each of these samples was collected from one railroad car.

The details regarding place of delivery, contract guaranties, and price per ton are given on pages 60 to 92. The ton is the short ton of 2,000 pounds, unless otherwise stated.

To obtain complete information on all the coals has not been possible, hence columns 2, 3, 4, 5, and 6 of the table are not always filled in completely. For some contracts the information furnished regarding the origin of the coals was very meager; then the State mine inspectors' reports, commercial coal-mine directories, and other publications were freely consulted and additional information was obtained in order that the coals could be described more fully and their origin determined more definitely.

TABLE 1.—*Coals analyzed for the United States*
CANADIAN COALS.

Index No. ¹	Where mined.			Commercial name of coal.	Size of coal.
	Province and town.	Mine.	Bed.		
1	2	3	4	5	6
	BRITISH COLUMBIA.				
1	Michel and Fernie..	Michel and Coal Creek.	.....	Crows Nest Pass.	Mixture of lump over 1, 2, and 5 inch screen.
	VANCOUVER ISLAND.				
2	Nanaimo.....	Wellington.....	.....	Wellington.....	Lump, over 3½-inch screen.
3	.....do.....	.....do.....	.....	.....do.....	.....do.....
4	.....do.....	.....do.....	.....	.....do.....	.....do.....
5	.....do.....	.....do.....	.....	.....do.....	.....do.....
6	.....do.....	.....do.....	.....	.....do.....	.....do.....
7	.....do.....	.....do.....	.....	.....do.....	.....do.....
8	.....do.....	.....do.....	.....	.....do.....	Lump, over 2½-inch screen.
9	.....do.....	.....do.....	.....	.....do.....	Lump, over 1-inch and through 4-inch screen.
10	.....do.....	.....do.....	.....	.....do.....	Steam.
11	South Wellington..	South Wellington.	.....	South Wellington.	Lump, over 1-inch screen.
12	.....do.....	.....do.....	.....	.....do.....	.....do.....
13	.....do.....	.....do.....	.....	.....do.....	.....do.....
14	.....do.....	.....do.....	.....	.....do.....	Lump.

¹ See pages 60 to 92 of this bulletin for kind of coal, point of delivery, contract guaranties, and price.

Government during the fiscal years 1916-1922.

CANADIAN COALS.

Tons delivered.	Proximate analysis.					Calorific value per pound.						Number of analyses averaged.	Index No. ¹
	As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
	Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
7	8	9	10	11	12	13	14	15	16	17	18	19	20
1,569	1.71	22.92	67.93	9.15	0.59	13,804	7,669	14,044	7,802	15,458	8,588	19	1
1,376	2.82	39.92	48.19	11.89	1.00	12,472	6,929	12,834	7,130	14,566	8,092	11	2
2,566	2.79	40.26	47.63	12.11	.99	12,463	6,924	12,821	7,123	14,588	8,104	16	3
3,468	3.03	40.00	46.97	13.03	1.07	12,280	6,822	12,664	7,036	14,561	8,089	8	4
2,235	2.87	40.04	47.57	12.39	1.01	12,352	6,862	12,717	7,065	14,515	8,064	7	5
900	2.90	40.03	47.79	12.18	.92	12,426	6,903	12,797	7,109	14,572	8,096	6	6
405	2.70	40.03	47.77	12.20	.88	12,404	6,891	12,748	7,082	14,519	8,066	4	7
6,208	4.04	39.75	46.96	13.29	.85	12,128	6,738	12,639	7,022	14,576	8,098	8	8
2,250	2.79	39.51	48.13	12.36	1.01	12,411	6,895	12,767	7,093	14,568	8,093	14	9
4,000	2.78	39.84	47.92	12.24	1.01	12,432	6,907	12,788	7,104	14,572	8,096	10	10
1,700	2.25	39.50	48.63	11.87	.72	12,659	7,033	12,950	7,194	14,694	8,163	13	11
2,674	2.66	39.41	49.79	10.80	.72	12,804	7,113	13,154	7,308	14,747	8,193	7	12
687	2.14	38.00	48.16	13.84	.62	12,352	6,862	12,622	7,012	14,649	8,138	5	13
1,400	3.30	39.53	48.30	12.17	.67	12,466	6,926	12,891	7,162	14,677	8,154	12	14

ANALYSES OF DELIVERED COAL.

TABLE 1.—*Coals analyzed for the United States*

UNITED STATES COALS.

Index No.	Where mined.			Commercial name of coal.	Size of coal.
	State, county, and town.	Mine.	Bed.		
1	2	3	4	5	6
	ALABAMA.				
	BIBB COUNTY.				
15	Belle Ellen.....	Belle Ellen.....	Thompson and Youngblood.	Belle Ellen.....	Lump.....
16	Hargrove.....	Hargrove.....	Underwood.....	Hargrove.....	do.....
	JEFFERSON COUNTY.				
17	Arcadia.....	Arcadia.....	Pratt.....	Pratt.....	Run of mine.....
18	Blossburg.....	Blossburg.....	do.....	do.....	do.....
19	Clift.....	Clift.....	do.....	do.....	do.....
20	Edgewater.....	Edgewater.....	do.....	Old Pratt.....	Lump.....
21	Pinson.....	Dixiana.....	Black Creek.....	Imperial.....	Nut and pea (washed)
22	do.....	do.....	do.....	do.....	Pea (washed).....
23	do.....	do.....	do.....	do.....	Pea, $\frac{1}{2}$ -inch to $\frac{3}{4}$ -inch (washed).....
24	Pratt City (near).....	Pratt (mines).....	Pratt.....	Old Pratt.....	Run of mine.....
25	do.....	do.....	do.....	do.....	do.....
	ST. CLAIR COUNTY.				
26	Acmar.....	Acmar.....	Henry Ellen.....	Acmar.....	Steam, through 4-inch screen (washed).....
27	do.....	New Acton.....	Helena.....	New Acton.....	do.....
28	do.....	do.....	do.....	do.....	Steam, over 3-inch screen (washed).....
	WALKER COUNTY.				
29	Corona.....	Corona.....	Corona.....	Corona.....	Lump.....
30	Payne Bend.....	Payne Bend.....	Pratt.....	Pratt.....	Run of mine.....
31	do.....	do.....	do.....	do.....	do.....
	ARKANSAS.				
	FRANKLIN COUNTY.				
32	Alix.....	Dodson, No. 2.....	Denning.....	.....	Lump, over $1\frac{1}{2}$ -inch bar screen.....
33	do.....	do.....	do.....	.....	Slack, through $1\frac{1}{2}$ -inch bar screen.....
	SEBASTIAN COUNTY.				
34	Bonanza.....	Woodson Barr.....	Upper Hartshorne.....	.....	Run of mine.....
35	Greenwood.....	No. 2.....	Hartshorne.....	Greenwood.....	Lump, over 2 $\frac{1}{2}$ -inch round-hole screen.....
36	do.....	Nos. 1 and 2.....	do.....	do.....	Lump, over 6-inch screen.....
37	Hartford.....	No. 10.....	Lower Hartshorne.....	.....	Run of mine.....
38	Prairie Creek.....	No. 11.....	do.....	.....	do.....
39	Huntington.....	No. 6.....	Upper and Lower Hartshorne.....	.....	do.....
40	do.....	do.....	do.....	.....	Nut, $1\frac{1}{2}$ -inch to $\frac{3}{4}$ -inch screen.....
41	do.....	do.....	do.....	.....	Slack, through $\frac{3}{4}$ -inch screen.....
	COLORADO.				
	GUNNISON COUNTY.				
42	Crested Butte.....	Horace.....	.....	.....	Anthracite No. 6.....

Government during the fiscal years 1916-1922—Continued.

UNITED STATES COALS.

Tons delivered.	Proximate analysis.					Calorific value per pound.						Number of analyses averaged.	Index No.
	As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
		Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.			Calories.
7	8	9	10	11	12	13	14	15	16	17	18	19	20
1,665	1.80	35.83	58.51	5.66	1.39	14,212	7,896	14,472	8,040	15,340	8,522	34	15
978	3.33	36.27	57.26	6.47	.68	13,495	7,497	13,960	7,756	14,926	8,292	3	16
2,208	2.11	29.27	57.02	13.71	1.26	12,807	7,115	13,083	7,268	15,162	8,423	10	17
8,371	2.06	29.59	58.34	12.07	2.37	13,201	7,334	13,479	7,488	15,329	8,516	10	18
789	2.75	30.97	58.45	10.58	1.80	13,358	7,421	13,736	7,631	15,361	8,534	10	19
2,833	1.28	28.87	65.54	5.59	1.57	14,495	8,053	14,683	8,157	15,552	8,640	12	20
7,177	1.71	31.66	64.91	3.43	.69	14,642	8,134	14,897	8,276	15,426	8,570	14	21
8,552	3.42	31.50	62.04	6.46	.63	13,897	7,721	14,389	7,994	15,383	8,546	65	22
13,076	3.19	31.38	63.81	4.81	.64	14,186	7,881	14,653	8,141	15,393	8,552	125	23
19,658	1.28	29.52	64.11	6.37	1.50	14,357	7,976	14,543	8,079	15,532	8,629	20	24
15,380	1.39	29.15	64.89	5.96	1.39	14,385	7,992	14,588	8,104	15,513	8,618	19	25
2,503	3.62	36.08	56.59	7.33	.82	13,489	7,494	13,996	7,776	15,103	8,391	17	26
670	2.23	35.74	57.01	7.25	.83	13,576	7,542	13,971	7,762	15,063	8,368	11	27
1,563	3.54	35.82	57.02	7.16	.86	13,461	7,478	13,955	7,753	15,031	8,351	19	28
300	2.87	38.27	52.16	9.57	1.93	13,064	7,258	13,450	7,472	14,873	8,263	3	29
1,518	3.92	33.11	55.39	11.50	1.34	12,962	7,201	13,491	7,495	15,244	8,469	9	30
1,370	3.39	32.93	55.06	12.01	1.63	12,844	7,136	13,295	7,386	15,110	8,394	16	31
.....	2.25	14.00	77.10	8.90	2.40	13,734	7,630	14,054	7,806	15,423	8,568	1	32
.....	3.10	13.05	56.95	30.00	2.73	10,068	5,593	10,390	5,772	14,843	8,246	1	33
.....	2.60	16.75	70.60	12.65	1.25	13,025	7,236	13,373	7,429	15,310	8,506	1	34
2,331	1.36	18.02	70.39	11.59	3.08	13,459	7,477	13,645	7,581	15,434	8,574	14	35
678	1.25	17.63	69.58	12.79	3.18	13,307	7,393	13,475	7,486	15,451	8,584	14	36
.....	1.60	18.40	67.95	13.65	0.84	12,989	7,216	13,200	7,333	15,287	8,493	1	37
.....	1.68	17.83	66.94	15.23	2.18	12,782	7,101	13,000	7,222	15,336	8,520	1	38
.....	1.68	17.83	65.97	16.20	1.98	12,593	6,996	12,808	7,116	15,284	8,491	1	39
.....	2.10	17.20	62.40	20.40	2.05	11,919	6,622	12,175	6,764	15,295	8,497	1	40
.....	4.80	17.30	62.80	19.90	2.18	11,624	6,458	12,210	6,783	15,243	8,468	1	41
260	1.94	9.40	81.94	8.66	.87	13,740	7,633	14,012	7,784	15,340	8,522	5	42

TABLE 1.—*Coals analyzed for the United States*

UNITED STATES COALS—Continued.

Index No.	Where mined.			Commercial name of coal.	Size of coal.
	State, county, and town.	Mine.	Bed.		
1	2	3	4	5	6
	COLORADO—Con.				
	HUERFANO COUNTY.				
43	Oak View.....	Oakdale.....	Mammoth.....	Oakdale.....	Nut, 2½-inch by 1½-inch.
44	Pryor.....	Pryor.....	Walsen and Cameron.	Black Rose.....	Nut, over 1½-inch and through 3-inch screens.
45	Walsenburg.....	Turner, Gordon and Breen.	.....do.....	.....do.....	Lump, over 1½-inch screen.
	LAS ANIMAS COUNTY.				
46	Aguilar.....	Royal.....	Walsen.....	Royal.....	Lump, over 4-inch screen.
47	Brodhead.....	Brodhead.....	Middle Series.....	Brodhead.....	.....do.....
48	.....do.....	.....do.....	.....do.....	.....do.....	Lump, over 1½-inch and through 3-inch screens.
49	.....do.....	.....do.....	.....do.....	.....do.....	Run of mine.....
50	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
51	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
	WELD COUNTY.				
52	Puritan Station....	Puritan.....	Laramie.....	.....do.....	Slack, through 2½-inch screen.
	ILLINOIS.				
	CLINTON COUNTY.				
53	New Baden.....	No. 9.....	No. 6.....	New Baden.....	Run of mine.....
	FRANKLIN COUNTY.				
54	Logan.....	Logan.....	No. 6.....	Logan.....	Lump, over 6-inch screen.
55	.....do.....	.....do.....	.....do.....	.....do.....	Lump, over 5-inch screen.
56	.....do.....	.....do.....	.....do.....	.....do.....	Lump.....
57	.....do.....	.....do.....	.....do.....	.....do.....	Nut, over 1½-inch screen and through 3-inch screen.
58	.....do.....	.....do.....	.....do.....	.....do.....	Nut, over 2-inch and through 3-inch screens.
59	.....do.....	.....do.....	.....do.....	.....do.....	Nut, over 1½-inch and through 3½-inch screens.
60	.....do.....	.....do.....	.....do.....	.....do.....	Run of mine.....
61	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
62	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
	MADISON COUNTY.				
63	Donkville.....	No. 1.....	No. 6.....	Collinsville.....	Lump, over 2½-inch screen.
64	Maryville.....	No. 2.....	.....do.....	Maryville.....	Lump, over 6-inch screen.
65	.....do.....	.....do.....	.....do.....	.....do.....	Lump, over 5-inch screen.
66	.....do.....	.....do.....	.....do.....	.....do.....	Lump, over 3-inch shaker screen.
67	.....do.....	.....do.....	.....do.....	.....do.....	Run of mine.....

Government during the fiscal years 1916-1922—Continued.

UNITED STATES COALS—Continued.

Tons delivered.	Proximate analysis.					Calorific value per pound.						Number of analyses averaged.	Index No.
	As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
	Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
7	8	9	10	11	12	13	14	15	16	17	18	19	20
-----	4.04	40.10	47.41	12.49	0.47	11,556	6,420	12,043	6,691	13,762	7,646	3	43
2,298	2.68	36.70	49.45	13.85	.61	12,333	6,852	12,673	7,041	14,710	8,172	4	44
1,741	5.60	38.53	47.23	14.24	.58	11,287	6,271	11,957	6,643	13,942	7,745	25	45
2,210	1.75	34.37	52.39	13.24	.66	12,788	7,104	13,016	7,231	15,002	8,334	11	46
3,381	2.24	38.21	54.82	6.97	.56	13,510	7,506	13,820	7,678	14,855	8,253	7	47
3,249	2.22	38.63	53.55	7.82	.54	13,419	7,455	13,724	7,624	14,888	8,271	12	48
280	3.00	38.45	53.78	7.77	.56	13,316	7,398	13,728	7,627	14,885	8,269	4	49
1,309	2.20	38.01	54.05	7.94	.53	13,422	7,457	13,724	7,624	14,908	8,282	8	50
319	2.73	38.13	54.07	7.80	.51	13,343	7,413	13,717	7,621	14,877	8,265	6	51
-----	21.27	40.38	54.26	5.36	.64	9,748	5,416	12,382	6,879	13,083	7,268	5	52
-----	10.64	40.40	44.60	15.00	4.37	10,710	5,950	11,985	6,658	14,100	7,833	56	53
5,469	6.23	38.11	49.50	12.39	2.77	11,852	6,584	12,639	7,022	14,426	8,014	16	54
2,759	6.02	38.38	49.59	12.03	2.84	11,903	6,613	12,665	7,036	14,397	7,998	22	55
234	6.80	39.06	50.28	10.66	3.22	12,004	6,669	12,890	7,156	14,417	8,009	5	56
1,196	6.12	39.38	51.45	9.17	2.44	12,284	6,824	13,085	7,269	14,406	8,003	6	57
728	6.34	39.44	50.84	9.72	2.26	12,223	6,791	13,050	7,250	14,455	8,031	5	58
1,113	6.14	38.84	51.08	10.08	2.57	12,215	6,786	13,014	7,230	14,473	8,041	5	59
9,104	5.61	38.61	49.39	12.00	3.44	11,970	6,650	12,681	7,045	14,410	8,006	7	60
260	7.77	36.93	50.14	12.93	2.05	11,695	6,497	12,680	7,044	14,563	8,091	3	61
1,027	8.06	37.24	49.70	13.06	2.96	11,509	6,394	12,518	6,954	14,398	7,999	14	62
899	9.26	43.08	45.28	11.64	4.16	11,383	6,324	12,545	6,969	14,198	7,888	11	63
4,117	9.75	40.98	45.32	13.70	4.69	11,066	6,148	12,262	6,812	14,209	7,894	64	64
3,833	8.82	42.37	45.98	11.65	4.63	11,257	6,254	12,346	6,859	13,974	7,763	21	65
6,487	9.95	43.95	45.76	10.29	4.40	11,474	6,374	12,742	7,079	14,204	7,891	21	66
-----	11.20	43.35	46.52	10.13	3.95	11,353	6,307	12,785	7,103	14,226	7,903	6	67

TABLE 1.—*Coals analyzed for the United States*

UNITED STATES COALS—Continued.

Index No.	Where mined.			Commercial name of coal.	Size of coal.
	State, county, and town.	Mine.	Bed.		
1	2	3	4	5	6
	ILLINOIS—Con.				
	MARION COUNTY.				
68	Glenridge.....	Glenridge.....	No. 6.....	Glenridge.....	Nut, Nos. 1 and 2....
	PERRY COUNTY.				
69	Duquoin.....	Security.....	do.....	Security.....	Lump, over 6-inch screen and egg 3 by 6 inches.
70	do.....	do.....	do.....	do.....	Nut, over 2-inch screen and through 3-inch screen.
71	do.....	Majestic.....	do.....	Majestic.....	Lump, over 1½-inch screen.
72	Winkle.....	Winkle.....	do.....	Winkle.....	Lump.....
	ST. CLAIR COUNTY.				
73	Cooper Station and Signal Hill.	"B. B." and Suburban.	No. 6.....	"B. B.".....	do.....
	SALINE COUNTY.				
74	Eldorado.....	O'Gara, Nos. 8, 10, and 11.	No. 5.....	Harrisburg.....	Run of mine.....
75	Eldorado and Harrisburg.	O'Gara (mines).....	do.....	do.....	Lump, over 1½-inch screen.
76	do.....	do.....	do.....	do.....	do.....
77	Eldorado, Harrisburg and Carrier Mills.	O'Gara, Nos. 1, 3, 8, 9, 10, 11, 12, 14, and 15.	do.....	do.....	Lump, over 1½-inch and through 6-inch screens.
78	do.....	do.....	do.....	do.....	Nut, over 1½-inch or 2-inch and through 3-inch screens.
79	Eldorado and Harrisburg.	O'Gara (mines).....	do.....	do.....	Nut, 1½ by 2 inches.
80	Ledford and Harrisburg.	Big Creek (mines).....	do.....	Premium.....	Lump, over 6-inch screen.
81	do.....	do.....	do.....	do.....	do.....
	SANGAMON COUNTY.				
82	Springfield.....	Jeff.....	No. 5.....	do.....	Lump, over 3-inch screen.
83	do.....	do.....	do.....	do.....	Lump, over 2½-inch screen.
84	do.....	do.....	do.....	do.....	Nut.....
85	do.....	do.....	do.....	do.....	Run of mine.....
	TAZEWELL COUNTY.				
86	Hilliards.....	Groverland.....	No. 5.....	do.....	do.....
	VERMILION COUNTY.				
87	Danville and Oakwood.	Nos. 1, 2, and 3.....	No. 7.....	Electric.....	Lump and slack.....
88	do.....	do.....	do.....	do.....	do.....
89	do.....	Nos. 1, 4, and 5.....	do.....	do.....	Nut and slack through 3-inch screen.
90	do.....	do.....	do.....	do.....	Nut and slack through 3½-inch screen.

Government during the fiscal years 1916-1922—Continued.

UNITED STATES COALS—Continued.

Tons delivered.	Proximate analysis.					Calorific value per pound.						Number of analyses averaged.	Index No.
	As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
	Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
7	8	9	10	11	12	13	14	15	16	17	18	19	20
7,059	9.05	37.61	51.33	11.06	2.16	11,652	6,473	12,811	7,117	14,404	8,002	54	68
15,282	8.67	37.07	52.53	10.40	1.65	11,672	6,484	12,780	7,100	14,263	7,924	42	69
1,709	11.37	38.38	52.22	9.40	1.68	11,569	6,427	13,053	7,252	14,407	8,004	21	70
1,930	9.08	36.97	54.56	8.47	.74	12,029	6,683	13,230	7,350	14,454	8,030	6	71
4,171	8.92	41.03	45.16	13.81	4.40	11,160	6,200	12,253	6,807	14,216	7,898	47	72
772	8.60	39.57	43.53	16.90	5.17	10,732	5,962	11,742	6,523	14,130	7,850	9	73
.....	7.69	34.80	53.18	12.02	2.32	11,811	6,562	12,795	7,108	14,543	8,079	13	74
1,245	6.32	36.34	54.46	9.20	1.90	12,343	6,857	13,176	7,320	14,511	8,062	3	75
6,079	6.41	36.08	54.98	8.94	2.02	12,478	6,932	13,333	7,407	14,642	8,134	22	76
10,316	5.01	36.87	53.38	9.75	2.51	12,586	6,992	13,250	7,361	14,681	8,156	91	77
2,022	5.53	36.73	53.61	9.66	2.69	12,521	6,956	13,254	7,363	14,671	8,151	11	78
2,512	6.76	35.20	55.90	8.90	1.62	12,475	6,931	13,379	7,433	14,686	8,159	7	79
491	5.54	37.46	53.89	8.65	2.60	12,742	7,079	13,489	7,494	14,766	8,203	12	80
494	5.57	37.08	54.85	8.07	2.22	12,791	7,106	13,546	7,526	14,735	8,186	12	81
499	12.35	40.68	46.94	12.38	4.23	10,816	6,009	12,340	6,856	14,084	7,824	4	82
3,846	12.65	40.22	46.76	13.02	3.82	10,809	6,005	12,374	6,874	14,226	7,903	32	83
380	12.89	40.19	46.25	13.56	4.10	10,696	5,942	12,279	6,822	14,205	7,892	9	84
35,770	12.79	39.24	42.88	17.88	4.49	10,141	5,634	11,628	6,460	14,160	7,867	8	85
18,750	5.63	39.58	48.23	12.19	3.51	11,794	6,552	12,498	6,943	14,233	7,907	375	86
18,390	12.25	39.70	45.57	14.73	1.47	10,790	5,994	12,296	6,831	14,420	8,011	40	87
16,009	11.10	40.59	43.38	16.03	3.58	10,796	5,998	12,144	6,747	14,462	8,034	35	88
15,649	11.07	39.66	42.34	18.00	4.18	10,502	5,834	11,809	6,561	14,401	8,001	33	89
14,505	9.73	40.24	42.17	17.59	3.96	10,675	5,931	11,826	6,570	14,350	7,972	32	90

TABLE 1.—*Coals analyzed for the United States*

UNITED STATES COALS—Continued.

Index No.	Where mined.			Commercial name of coal.	Size of coal.
	State, county, and town.	Mine.	Bed.		
1	2	3	4	5	6
	ILLINOIS—Con.				
	WILLIAMSON COUNTY.				
91	Herrin.....		No. 6.....	Blizzard.....	Lump, over 3-inch screen.
92	Johnson City.....	Black Briar.....	.....do.....	Black Briar.....	.....do.....
93	.....do.....	.....do.....	.....do.....	.....do.....	Nut, over 1½-inch and through 3-inch screens.
	INDIANA.				
	KNOX COUNTY				
94	Bicknell.....	Tecumseh, Nos. 1 and 2.	No. 5.....		Nut, Nos. 1 and 2.....
	IOWA.				
	DALLAS AND BOONE COUNTY.				
95	Zook Spur, Madrid.	Scandia, No. 4.....		Fancy Chunk.....	Lump, over 2-inch screen.
96	.....do.....	Scandia, No. 2.....			Egg.....
	KANSAS.				
	CRAWFORD COUNTY.				
97	Frontenac.....		Stripping.....	Cherokee.....	Run of mine.....
	LEAVENWORTH COUNTY.				
98	Leavenworth.....	Home Riverside, Nos. 1 and 2.	Leavenworth.....	Home Riverside	Lump.....
99	.....do.....	.....do.....	.....do.....	.....do.....	Run of mine.....
100	Richardson.....	Carr.....	.....do.....	Carr.....	Lump, over 2-inch mesh screen.
101	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
102	.....do.....	.....do.....	.....do.....	.....do.....	Run of mine.....
	KENTUCKY.				
	BELL COUNTY.				
103	Amru.....	Crane Creek.....		Crane Creek.....	.....do.....
104	Arjay.....	Glendon.....	Straight Creek.....		Lump, over 4-inch round-hole screen.
105	.....do.....	.....do.....	.....do.....		Egg, 2 by 4 inch round screen.
106	.....do.....	.....do.....	.....do.....		Nut and slack, through 2-inch round screen.
107	Balkan.....	Balkan.....	Creech.....		Lump, over 4-inch round and 4-inch bar screens.
108	.....do.....	.....do.....	.....do.....		Egg, 2 by 4 inch bar screen.
109	.....do.....	.....do.....	.....do.....		Nut and slack, through 2-inch round screen.
110	Cardinal.....	Cardinal, No. 1.....	Harlan.....		Run of mine.....
111	.....do.....	.....do.....	.....do.....		.....do.....
112	.....do.....	.....do.....	.....do.....		Nut and slack, through ¾ to 1½ inch bar screen.

¹ Sample exposed to showers during collection and preparation.

Government during the fiscal years 1916-1922—Continued.

UNITED STATES COALS—Continued.

Tons delivered.	Proximate analysis.					Calorific value per pound.						Number of analyses averaged.	Index No.
	As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
	Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
7	8	9	10	11	12	18	14	15	16	17	18	19	20
3,416	6.71	34.85	51.79	13.36	2.24	11,741	6,523	12,585	6,992	14,526	8,070	11	91
3,226	7.64	35.06	54.23	10.71	1.42	12,011	6,673	13,005	7,225	14,565	8,092	11	92
1,096	7.18	34.30	55.06	10.64	1.66	12,054	6,697	12,986	7,214	14,532	8,073	5	93
4,870	9.92	40.49	48.86	10.65	3.57	11,572	6,429	12,846	7,137	14,377	7,987	45	94
596	14.10	41.41	41.68	16.91	4.38	10,260	5,700	11,944	6,636	14,375	7,986	12	95
538	15.26	39.77	41.55	18.68	4.54	9,877	5,487	11,656	6,476	14,333	7,963	11	96
1,040	5.51	35.71	54.03	10.26	4.32	12,606	7,003	13,341	7,412	14,866	8,259	12	97
8,900	9.19	39.82	43.98	16.20	4.85	10,981	6,101	12,092	6,718	14,430	8,017	38	98
13,359	7.80	40.07	45.49	14.44	4.76	11,414	6,341	12,380	6,878	14,469	8,038	12	99
12,447	8.92	39.40	43.86	16.74	5.23	11,011	6,117	12,089	6,716	14,520	8,067	29	100
12,400	8.86	39.76	45.18	15.06	5.26	11,239	6,244	12,332	6,851	14,518	8,066	28	101
3,722	9.05	33.09	38.24	28.67	4.66	9,265	5,147	10,187	5,659	14,282	7,934	29	102
1,439	2.87	36.25	54.69	9.06	1.36	13,259	7,366	13,651	7,584	15,011	8,339	15	103
200	3.19	41.59	56.77	1.64	.83	14,325	7,958	14,797	8,221	15,044	8,358	1	104
50	2.65	39.60	58.24	2.16	.83	14,274	7,930	14,663	8,146	14,987	8,326	1	105
200	3.17	37.72	57.07	5.21	.96	13,713	7,618	14,162	7,868	14,940	8,300	1	106
350	1.65	39.35	56.97	3.68	.82	14,283	7,935	14,523	8,068	15,078	8,377	1	107
450	1.79	39.11	55.63	5.26	1.03	13,987	7,771	14,242	7,912	15,033	8,352	1	108
450	2.05	36.94	54.24	8.82	.95	13,371	7,428	13,651	7,584	14,971	8,317	1	109
200	2.55	36.94	58.25	4.81	.81	13,991	7,773	14,357	7,976	15,082	8,379	1	110
200	4.13	37.57	56.24	6.19	.87	13,496	7,498	14,077	7,821	15,006	8,337	1	111
25	2.40	37.21	55.67	7.12	.86	13,564	7,536	13,898	7,721	14,963	8,313	1	112

TABLE 1.—*Coals analyzed for the United States*

UNITED STATES COALS—Continued.

Index No. ¹	Where mined.			Commercial name of coal.	Size of coal.
	State, county, and town.	Mine.	Bed.		
1	2	3	4	5	6
	KENTUCKY—Con.				
	BELL COUNTY—con.				
113	Cary.....	Cary.....	Straight Creek.....		Lump, over 4-inch round screen.
114	.....do.....	.....do.....	.....do.....		Run of mine, through 4-inch round screen.
115	Colmar.....	Amru.....	Mason.....		Run of mine.....
116	Logmont.....	Crystal.....	Poplar Lick.....		Lump, over 4-inch round screen.
117	.....do.....	.....do.....	.....do.....		Egg, 2 by 4 inch round screen (washed).
118	.....do.....	.....do.....	.....do.....		Nut and slack, through 2-inch round screen (washed).
119	Pineville.....	Arcadia.....	Straight Creek.....		Run of mine.....
120	Pineville (Logan's Switch).	New S t r a i g h t Creek.	.....do.....		.....do.....
121	Ralston.....	Atlas.....	Hignite.....		Lump, over 4-inch round screen.
122	.....do.....	.....do.....	.....do.....		Egg, 2 by 4 inch round screen.
123	.....do.....	.....do.....	.....do.....		Nut and slack, through 2-inch round screen.
124	.....do.....	Pinnacle.....	Poplar Lick.....		Lump, over 4-inch round screen.
125	.....do.....	.....do.....	.....do.....		Egg, 2 by 4 inch round screen.
126	.....do.....	.....do.....	.....do.....		Nut and slack, through 2-inch round screen (washed).
127	Shamrock.....	Nos. 1 and 2....	Klondike and Sandstone Parting.		Lump, over 4-inch round screen.
128	.....do.....	.....do.....	.....do.....		Egg, 2 by 4 inch round screen.
129	.....do.....	.....do.....	.....do.....		Nut and slack through 2-inch round screen.
	CHRISTIAN COUNTY.				
130	Mannington.....	Williams.....	Empire.....		Run of mine.....
	HARLAN COUNTY.				
131	Ages.....	Harlan Collieries	Harlan.....		Lump over 4½-inch round and 3½-inch bar screens.
132	.....do.....	.....do.....	.....do.....		Egg, 1½ by 4½ inch round and 3½-inch bar screens.
133	.....do.....	.....do.....	.....do.....		Nut and slack, through 1½-inch round screen.
134	Chevrolet.....	Chevrolet, Nos. 1 and 2.	.....do.....		Lump, over 4-inch bar screen.
135	.....do.....	.....do.....	.....do.....		Run of mine, through 4-inch bar screen.
136	Coalgood.....	Mary Helen.....	.....do.....		Lump, over 3½-inch round screen.
137	.....do.....	.....do.....	.....do.....		Egg, 2 by 3½ inch round screen.
138	.....do.....	.....do.....	.....do.....		Nut and slack, through 2-inch round screen.

¹Sample exposed to showers during collection and preparation.

Government during the fiscal years 1916-1922—Continued.

UNITED STATES COALS—Continued.

Tons delivered.	Proximate analysis.					Calorific value per pound.						Number of analyses averaged.	Index No.
	As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
	Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
7	8	9	10	11	12	13	14	15	16	17	18	19	20
200	1.75	40.03	55.66	4.31	0.85	14,091	7,828	14,342	7,968	14,988	8,327	1	113
250	2.59	38.08	55.98	5.94	.85	13,773	7,652	14,139	7,855	15,032	8,351	1	114
600.	1.65	38.64	55.15	6.21	1.55	13,898	7,721	14,131	7,851	15,067	8,371	1	115
50	1.45	38.39	53.36	8.25	2.77	13,494	7,497	13,692	7,607	14,923	8,291	1	116
35	2.81	39.16	51.51	9.33	2.72	13,194	7,330	13,575	7,542	14,972	8,318	1	117
85	7.46	38.35	49.53	12.12	2.95	12,028	6,682	12,998	7,221	14,791	8,217	1	118
300	1.94	36.38	53.08	10.54	.71	13,032	7,240	13,290	7,383	14,856	8,253	1	119
100	2.28	38.12	57.50	4.38	1.14	14,105	7,836	14,434	8,019	15,095	8,386	1	120
50	2.68	38.64	56.78	4.58	.52	13,794	7,663	14,174	7,874	14,854	8,252	1	121
35	2.95	38.75	56.02	5.23	.63	13,664	7,591	14,079	7,822	14,856	8,253	1	122
100	¹ 4.51	34.73	52.97	12.30	.94	12,390	6,883	12,975	7,208	14,795	8,219	1	123
50	1.56	41.06	53.54	5.40	2.97	13,994	7,774	14,216	7,898	15,027	8,348	1	124
50	1.69	41.09	52.08	6.83	3.22	13,662	7,590	13,897	7,721	14,916	8,287	1	125
50	¹ 7.28	39.84	48.59	11.57	2.89	12,207	6,782	13,165	7,314	14,888	8,271	1	126
125	2.20	38.25	54.72	7.03	2.09	13,617	7,565	13,923	7,735	14,976	8,320	1	127
75	2.22	36.82	53.16	10.02	1.65	13,057	7,254	13,353	7,418	14,840	8,244	1	128
225	2.97	33.64	50.17	16.19	2.41	11,982	6,657	12,349	6,861	14,735	8,186	1	129
600	9.07	38.55	50.56	10.89	3.41	11,799	6,555	12,976	7,209	14,563	8,091	3	130
250	2.07	39.06	56.64	4.30	.97	14,015	7,786	14,311	7,951	14,954	8,308	1	131
200	2.14	38.35	55.42	6.23	.99	13,754	7,641	14,055	7,808	14,989	8,327	1	132
200	2.36	36.62	55.87	7.51	1.05	13,495	7,497	13,821	7,678	14,943	8,302	1	133
200	2.38	39.26	57.66	3.08	.75	14,256	7,920	14,604	8,113	15,068	8,371	1	134
550	2.66	37.84	56.06	6.10	.83	13,721	7,623	14,096	7,831	15,012	8,340	1	135
350	2.24	39.29	57.65	3.06	.95	14,233	7,907	14,559	8,088	15,019	8,344	1	136
200	1.97	40.21	56.45	3.34	.91	14,197	7,887	14,482	8,046	14,982	8,323	1	137
450	2.39	38.20	55.44	6.36	.96	13,673	7,596	14,008	7,782	14,959	8,311	1	138

UNITED STATES COALS—Continued.

TABLE 1.—Coals analyzed for the United States

Index No.	Where mined.			Commercial name of coal.	Size of coal.
	State, county, and town.	Mine.	Bed.		
1	2	3	4	5	6
	KENTUCKY—Con.				
	HARLAN COUNTY—continued.				
139	Coburn.....	Mill Creek.....	Smith or Mill Creek.....		Lump, over 4-inch round screen.
140	do.....	do.....	do.....		Egg, 2 by 4 inch round screen.
141	do.....	do.....	do.....		Nut and slack, through 2-inch round screen.
142	Coxton.....	Coxton.....	Harlan.....		Run of mine.....
143	do.....	Kay U.....	do.....		do.....
144	Evarts.....	Harlan - Cooperative.	Darby.....		do.....
145	Harlan.....	Tway.....	Harlan.....		Lump, over 4-inch round screen.
146	do.....	do.....	do.....		Egg, 2 by 4 inch round screen.
147	do.....	do.....	do.....		Nut and slack, through 2-inch round screen.
148	High Splint.....	Harlan.....	do.....		Run of mine.....
149	do.....	High Splint.....	High Splint.....		Lump, over 4-inch bar screen.
150	do.....	do.....	do.....		Egg, 2-inch round by 4-inch bar screen.
151	do.....	do.....	do.....		Nut and slack, through 2-inch round screen.
152	Kitts.....	Clover Fork.....	Harlan.....		Lump, over 2-inch bar screen.
153	do.....	do.....	do.....		Egg, 2-inch round by 2-inch bar screen.
154	do.....	do.....	do.....		Nut and slack, through 2-inch round screen.
155	do.....	Golden Ash.....	do.....		Lump, over 6-inch round and 4-inch bar screens.
156	do.....	do.....	do.....		Run of mine, through 6-inch round and 4-inch bar screens.
157	do.....	Rex.....	do.....		Lump, over 4-inch round screen.
158	do.....	do.....	do.....		Egg, 2 by 4 inch round screen.
159	do.....	do.....	do.....		Nut and slack, through 2-inch round screen.
160	Liggett.....	Bowling.....	do.....		Run of mine.....
161	do.....	Liggett.....	do.....		Lump, over 3-inch bar screen.
162	do.....	do.....	do.....		Egg, 1½-inch round by 3-inch bar screens.
163	do.....	do.....	do.....		Nut and slack, through 1½-inch round screen.
164	do.....	Mahan-Ellison.....	do.....		Run of mine.....
165	Shields.....	Berger, No. 1.....	do.....		do.....
166	Twila.....	Crech, Nos. 1 and 2.	Wallins.....		Lump, over 4-inch round and 3-inch bar screens.

Government during the fiscal years 1916-1922—Continued.

UNITED STATES COALS—Continued.

Tons delivered.	Proximate analysis.					Calorific value per pound.						Number of analyses averaged.	Index No.
	As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
	Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
7	8	9	10	11	12	13	14	15	16	17	18	19	20
250	2.91	36.47	56.16	7.37	0.72	13,124	7,291	13,517	7,509	14,592	8,107	1	139
200	2.55	37.16	54.24	8.60	.89	13,042	7,246	13,383	7,435	14,642	8,134	1	140
400	3.11	36.09	53.79	10.12	1.05	12,677	7,043	13,084	7,269	14,557	8,087	1	141
650	2.17	38.38	56.20	5.42	.90	13,843	7,691	14,150	7,861	14,961	8,312	1	142
500	2.42	38.67	55.55	5.78	.90	13,773	7,652	14,115	7,842	14,981	8,323	1	143
150	2.00	38.56	55.10	6.34	.76	13,672	7,596	13,951	7,751	14,895	8,275	1	144
300	2.32	39.23	57.62	3.15	.69	14,216	7,898	14,554	8,086	15,027	8,348	1	145
150	2.11	39.26	57.36	3.38	.73	14,261	7,923	14,568	8,093	15,078	8,377	1	146
300	2.25	36.49	58.09	5.42	.72	13,925	7,736	14,246	7,914	15,062	8,368	1	147
400	1.76	38.25	54.29	7.46	1.23	13,524	7,513	13,766	7,648	14,876	8,264	1	148
300	4.00	36.78	58.53	4.69	.72	13,620	7,567	14,188	7,882	14,886	8,270	1	149
150	3.39	37.54	56.33	6.13	.76	13,417	7,454	13,888	7,716	14,795	8,219	1	150
200	4.00	35.55	53.19	11.26	.86	12,410	6,894	12,927	7,182	14,567	8,093	1	151
400	2.35	39.15	57.82	3.03	.68	14,289	7,938	14,633	8,129	15,090	8,383	1	152
150	2.12	37.94	56.70	5.36	.73	13,894	7,719	14,195	7,886	14,999	8,333	1	153
350	2.58	36.85	56.15	7.00	.80	13,503	7,502	13,862	7,701	14,905	8,281	1	154
100	2.26	38.50	57.58	3.92	.76	14,119	7,844	14,445	8,025	15,034	8,352	1	155
600	2.89	36.89	56.13	6.98	.75	13,534	7,519	13,937	7,743	14,983	8,324	1	156
150	2.17	38.41	58.14	3.45	.82	14,199	7,888	14,514	8,063	15,033	8,352	1	157
150	2.10	39.34	56.08	4.58	.92	14,019	7,788	14,320	7,956	15,007	8,337	1	158
200	2.40	37.09	54.26	8.65	.88	13,293	7,385	13,620	7,567	14,910	8,283	1	159
125	3.08	35.81	59.75	4.44	.82	13,967	7,759	14,411	8,006	15,081	8,378	1	160
75	2.38	39.08	58.50	2.42	.73	14,316	7,953	14,665	8,147	15,029	8,349	1	161
50	2.53	38.45	58.09	3.46	.71	14,079	7,822	14,444	8,024	14,962	8,312	1	162
75	3.67	34.67	55.89	9.44	.81	12,987	7,215	13,482	7,490	14,887	8,271	1	163
50	2.85	36.73	57.41	5.86	.77	13,685	7,603	14,087	7,826	14,964	8,313	1	164
450	2.35	38.71	55.20	6.09	.94	13,708	7,616	14,038	7,799	14,948	8,304	1	165
600	2.19	38.19	58.76	3.05	.67	13,978	7,766	14,291	7,939	14,741	8,189	1	166

TABLE 1.—*Coals analyzed for the United States*
UNITED STATES COALS—Continued.

Index No.	Where mined.			Commercial name of coal.	Size of coal.
	State, county, and town.	Mine.	Bed.		
1	2	3	4	5	6
	KENTUCKY—Con.				
	HARLAN COUNTY—continued.				
167	Twila.....	Creech, Nos. 1 and 2.	Wallins.....		Egg, 2-inch round by 3-inch bar screen.
168	.....do.....	.....do.....	.....do.....		Nut and slack, through 2-inch round screen.
169	.....do.....	Creech, No. 1.....	.....do.....		.....do.....
170	.....do.....	Kenton.....	.....do.....	Kenton.....	.....do.....
	KNOX COUNTY.				
171	Anchor.....	Anchor.....	Dean.....		Lump, over 3-inch bar screen
172	.....do.....	.....do.....	.....do.....		Run of mine, through 3-inch bar screen.
173	Trosper.....	Trosper.....	.....do.....		Lump, over 4-inch bar screen.
174	.....do.....	.....do.....	.....do.....		Run of mine, through 4-inch bar screen.
	M'CREARY COUNTY.				
175	Shoopman.....	"A".....	Stearns, No. 1.....		Run of mine.....
176	Worley.....	No. 4.....	Stearns, No. 1½.....		Lump, over 4-inch round screen.
177	.....do.....	.....do.....	.....do.....		Egg, 2 by 4 inch round screen.
178	.....do.....	.....do.....	.....do.....		Nut and slack, through 2-inch round screen.
179	Yamacraw.....	No. 11.....	.....do.....		Lump, over 4-inch round screen.
180	.....do.....	.....do.....	.....do.....		Egg, 2 by 4 inch round screen.
181	.....do.....	.....do.....	.....do.....		Nut and slack, through 2-inch round screen.
	MUHLENBERG COUNTY.				
182	Mercer.....	.....do.....	.....do.....		Lump, over 2½-inch screen.
	OHIO COUNTY.				
183	Beaver Dam or McHenry.	Taylor.....	No. 9.....	Taylor.....	Run of mine.....
	UNION COUNTY.				
184	Dekovan.....	.....do.....	No. 9.....	Cypress Creek.....	.....do.....
185	Sturgis.....	Nos. 1, 2, 8, and 9.	.....do.....	Tradewater.....	Lump.....
186	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
187	.....do.....	.....do.....	.....do.....	.....do.....	Pea and slack.....
188	.....do.....	.....do.....	.....do.....	.....do.....	Run of mine.....
189	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
	WEBSTER COUNTY.				
190	Wheatcroft.....	West Kentucky mines.	.....do.....	.....do.....	.....do.....
191	.....do.....	.....do.....	.....do.....	.....do.....	Lump, over 2½-inch screen.

¹ Sample exposed to showers during collection and preparation.

Government during the fiscal years 1916-1922—Continued.

UNITED STATES COALS—Continued.

Tons delivered.	Proximate analysis.					Calorific value per pound.						Number of analyses averaged.	Index No.
	As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
	Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
7	8	9	10	11	12	13	14	15	16	17	18	19	20
350	2.23	41.33	54.99	3.68	0.72	13,891	7,717	14,208	7,893	14,751	8,195	1	167
400	2.31	38.94	52.53	8.53	1.50	13,113	7,285	13,423	7,457	14,675	8,153	1	168
300	4.12	38.22	54.31	7.47	.94	13,115	7,286	13,679	7,599	14,783	8,213	1	169
5,681	4.47	35.35	55.76	8.89	.85	12,993	7,218	13,601	7,556	14,928	8,293	15	170
75	3.67	39.81	55.12	5.07	1.00	13,541	7,523	14,057	7,809	14,808	8,227	1	171
75	3.46	37.86	52.13	10.1	.85	12,755	7,086	13,212	7,340	14,682	8,157	1	172
150	2.25	39.56	55.37	5.07	.80	13,742	7,634	14,058	7,810	14,809	8,227	1	173
150	2.90	35.68	50.42	13.90	.77	12,150	6,750	12,513	6,952	14,533	8,074	1	174
1,050	2.94	36.89	52.02	11.09	2.14	12,749	7,083	13,135	7,297	14,773	8,207	1	175
550	3.01	39.09	56.89	4.02	.57	13,895	7,719	14,326	7,959	14,926	8,292	1	176
200	3.74	37.18	57.97	4.85	.62	13,651	7,584	14,181	7,878	14,904	8,280	1	177
250	4.14	34.14	54.22	11.64	.62	12,401	6,889	12,937	7,187	14,641	8,134	1	178
300	3.57	38.62	54.39	6.99	.51	13,382	7,434	13,877	7,709	14,920	8,289	1	179
200	3.54	36.00	56.94	7.06	.62	13,337	7,409	13,826	7,681	14,886	8,270	1	180
300	4.08	34.86	55.39	9.75	.71	12,775	7,097	13,319	7,399	14,759	8,199	1	181
5,119	7.42	39.09	49.84	11.07	3.82	11,941	6,634	12,898	7,166	14,504	8,058	38	182
481	8.37	40.03	49.50	10.47	2.83	11,900	6,611	12,987	7,215	14,506	8,059	3	183
-----	5.89	36.41	50.19	13.40	3.61	11,896	6,609	12,640	7,022	14,596	8,109	43	184
10,017	4.06	36.84	52.78	10.38	2.14	12,687	7,048	13,224	7,347	14,756	8,198	8	185
-----	4.61	36.14	54.51	9.35	1.16	12,773	7,096	13,390	7,439	14,771	8,206	8	186
6,652	3.89	36.95	51.28	11.77	2.91	12,487	6,987	12,992	7,218	14,725	8,181	19	187
4,394	3.97	36.68	52.70	10.62	1.68	12,630	7,017	13,152	7,307	14,715	8,175	9	188
-----	5.79	36.79	50.04	13.17	3.99	11,986	6,659	12,723	7,068	14,653	8,141	7	189
282	4.21	34.31	55.52	10.17	1.51	12,669	7,038	13,226	7,348	14,723	8,179	5	190
1,000	4.48	36.74	54.20	9.06	1.17	12,752	7,084	13,350	7,417	14,680	8,156	9	191

TABLE 1.—*Coals analyzed for the United States*

UNITED STATES COALS—Continued.

Index No.	Where mined.			Commercial name of coal.	Size of coal.
	State, county, and town.	Mine.	Bed.		
1	2	3	4	5	6
MARYLAND.					
ALLEGANY COUNTY.					
192	Frostburg.....	Consolidation, No. 14.	Pittsburgh or Big Vein.	.....	Run of mine.....
193	Frostburg (near)...	Consolidation...	do.....	Georges Creek.....	do.....
194	do.....	do.....	do.....	do.....	do.....
195	do.....	do.....	do.....	do.....	do.....
196	do.....	do.....	do.....	do.....	do.....
197	Lonsconing.....	Koontz.....	Upper Sewickley or Tyson.	Tyson.....	do.....
198	do.....	Nos. 1, 2, 3, and 4.	do.....	do.....	do.....
199	do.....	do.....	do.....	do.....	do.....
200	do.....	do.....	do.....	do.....	Nut and slack (crushed). do.....
201	do.....	do.....	do.....	do.....	do.....
202	Midland.....	Consolidation, No. 8.	Pittsburgh or Big Vein.	.....	Run of mine.....
203	Ocean.....	Consolidation, No. 1.	do.....	.....	do.....
204	Phoenix.....	Phoenix.....	Bakerstown and Freeport.	Georges Creek-Elkhart.	do.....
GARRETT COUNTY.					
205	Dodson.....	Dodson (mines).	Upper and Lower Kittanning.	.....	do.....
206	do.....	do.....	do.....	.....	do.....
207	do.....	do.....	do.....	Dodson, No. 5.....	do.....
208	do.....	do.....	do.....	do.....	do.....
209	Gorman.....	Georgian.....	Freeport.....	Georgian.....	do.....
MONTANA.					
MUSSELSHELL COUNTY.					
210	Woodard.....	Carpenter Creek.	.....	Carpenter Creek.	do.....
NEW MEXICO.					
COLFAX COUNTY.					
211	Dawson.....	Dawson.....	Raton.....	Dawson.....	Lump, over 4-inch screen.
212	do.....	do.....	do.....	do.....	Run of mine.....
213	Koehler.....	Koehler.....	do.....	Swastika.....	Lump, over 2½-inch screen.
214	do.....	do.....	do.....	do.....	Lump, over 2½-inch bar screen.
M'KINLEY COUNTY.					
215	Gallup.....	Weaver, Heaton, and Navajo.	Nos. 1, 2, 3, 3½, and 5.	American block.	Lump, over 4-inch screen
RIO ARRIBA COUNTY.					
216	Monero.....	Monero.....	.....	Monero.....	Lump, over 2-inch screen.
217	do.....	Luchetti.....	Amargo.....	do.....	do.....
218	do.....	do.....	do.....	do.....	Run of mine.....
SANTA FE COUNTY.					
219	Madrid.....	Helen.....	Cook and White.	Cerrillos.....	Nut, over 1-inch and through 2½-inch screens.
220	do.....	do.....	do.....	do.....	Run of mine.....
221	do.....	No. 4.....	.....	do.....	Anthracite egg.....

Government during the fiscal years 1916-1922—Continued.

UNITED STATES COALS—Continued.

Tons delivered.	Proximate analysis.					Calorific value per pound.						Number of analyses averaged.	Index No.
	As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
	Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
7	8	9	10	11	12	13	14	15	16	17	18	19	20
.....	2.40	17.68	64.94	17.38	1.16	12,410	6,894	12,715	7,064	15,390	8,550	1	192
4,768	1.56	18.95	72.74	8.31	.98	14,087	7,826	14,310	7,950	15,607	8,671	13	193
1,104	3.40	19.34	71.82	8.84	.96	13,686	7,603	14,168	7,871	15,542	8,634	5	194
550	1.65	19.15	72.20	8.65	.89	14,059	7,811	14,295	7,942	15,649	8,694	6	195
2,954	2.03	18.30	73.77	7.93	.91	14,125	7,847	14,418	8,010	15,660	8,700	6	196
953	2.25	21.80	69.77	8.43	1.13	13,915	7,731	14,235	7,908	15,545	8,636	4	197
10,710	2.41	19.64	71.51	8.85	1.43	13,878	7,710	14,221	7,901	15,602	8,668	37	198
3,725	2.52	20.07	71.40	8.53	1.35	13,887	7,715	14,246	7,914	15,575	8,653	12	199
10,472	1.72	20.58	71.15	8.27	1.32	14,067	7,815	14,313	7,952	15,603	8,668	19	200
6,988	1.93	20.21	71.07	8.72	1.34	13,933	7,741	14,207	7,893	15,564	8,647	15	201
.....	1.80	18.03	74.64	7.33	.88	14,254	7,919	14,515	8,064	15,663	8,702	1	202
.....	1.98	18.33	72.79	8.88	.88	13,956	7,753	14,233	7,907	15,620	8,678	1	203
250	1.36	15.58	66.34	18.08	3.30	12,339	6,855	12,509	6,949	15,270	8,483	2	204
1,201	1.87	16.53	71.31	12.16	1.14	13,416	7,453	13,672	7,596	15,565	8,647	16	205
1,327	2.86	15.91	71.60	12.49	1.36	13,196	7,331	13,585	7,547	15,524	8,624	17	206
517	2.71	16.33	71.55	12.12	1.48	13,265	7,369	13,635	7,575	15,515	8,619	8	207
1,109	3.14	16.09	71.76	12.15	1.45	13,215	7,342	13,643	7,579	15,530	8,628	8	208
150	3.68	18.30	66.59	15.11	.71	12,717	7,065	13,203	7,335	15,553	8,641	2	209
161	18.30	39.03	54.37	6.60	.73	10,155	5,642	12,430	6,906	13,308	7,393	3	210
1,390	1.75	37.20	49.04	13.76	.63	12,736	7,076	12,963	7,202	15,031	8,351	8	211
680	1.79	36.32	47.31	16.37	.69	12,309	6,838	12,533	6,963	14,986	8,326	10	212
213	1.86	37.77	52.72	9.51	.71	13,315	7,397	13,567	7,537	14,993	8,329	7	213
227	1.93	36.55	50.00	13.45	.60	12,718	7,066	12,968	7,204	14,983	8,324	4	214
911	8.97	40.75	50.13	9.12	.61	11,721	6,512	12,876	7,153	14,168	7,871	3	215
157	2.27	39.52	49.06	11.42	3.46	12,752	7,084	13,048	7,249	14,730	8,183	6	216
258	2.41	38.72	48.87	12.41	2.96	12,618	7,010	12,930	7,183	14,762	8,201	6	217
1,449	2.78	39.53	49.26	11.21	2.96	12,688	7,049	13,051	7,251	14,699	8,166	7	218
867	2.06	35.86	52.42	11.72	.88	12,803	7,113	13,072	7,262	14,807	8,226	5	219
1,264	2.51	35.03	49.46	15.51	.96	12,215	6,786	12,529	6,961	14,829	8,238	7	220
1,289	4.28	5.80	84.90	9.30	.61	12,769	7,094	13,340	7,411	14,708	8,171	4	221

TABLE 1.—*Coals analyzed for the United States*

UNITED STATES COALS—Continued.

Index No.	Where mined.			Commercial name of coal.	Size of coal.
	State, county, and town.	Mine.	Bed.		
1	2	3	4	5	6
	NORTH DA-KOTA.				
	WILLIAMS COUNTY.				
222	Williston.....	U. S. Reclamation.	.....	.....	Lignite (crushed)....
	OHIO.				
	HOCKING COUNTY.				
223	Coalgate.....	Coalgate.....	No. 6.....	Hocking Valley.	Lump, over 3-inch screen.
224	.....do.....	.....do.....	.....do.....	.....do.....	Lump, over 2-inch screen.
	JEFFERSON COUNTY.				
225	Rush Run.....	Beach Flats....	No. 8.....	Beach Flats....	Nut, pea, and slack, through 2-inch screen.
	OKLAHOMA.				
	HASKELL COUNTY.				
226	McCurtain.....	No. 4.....	Panama.....	.....	Lump, over 1-inch bar screen.
227	.....do.....	.....do.....	.....do.....	.....	Slack, through 1-inch bar screen.
	LATIMER COUNTY.				
228	Degnan.....	No. 19.....	Lower Hartshorne.	.....	Lump, over 2½-inch screen.
229	.....do.....	.....do.....	.....do.....	.....	Nut, over 1½-inch and through 2½-inch screens.
230	.....do.....	.....do.....	.....do.....	.....	Slack, through 1½-inch screen.
231	Red Oak.....	No. 2.....	Hartshorne.....	.....	Run of mine.....
232	Wilburton.....	New No. 5.....	Upper Hartshorne.	.....	.....do.....
	LEFLORE COUNTY.				
233	Calhoun.....	No. 8.....	Witteville.....	.....	Lump, over 8-inch bar screen.
234	.....do.....	.....do.....	.....do.....	.....	Run of mine, through 8-inch bar screen.
235	Howe.....	No. 3.....	Lower Hartshorne.	.....	Run of mine.....
236	Williams.....	No. 1.....	Panama.....	.....	Lump, over 2½-inch screen.
237	.....do.....	.....do.....	.....do.....	.....	Nut, over 1½-inch and through 2½-inch screen.
238	.....do.....	.....do.....	.....do.....	.....	Slack, through 1½-inch screen.
	OKMULGEE COUNTY.				
239	Dewar.....	Nos. 3, 5, and 6..	Henryetta-Dewar.	Dewar.....	Run of mine.....
240	Henryetta.....	Victoria.....	Henryetta.....	.....	Lump, over 1-inch screen.
241	Henryetta and Dewar.	Henryetta and Dewar.	Henryetta-Dewar.	Henryetta-Dewar.	Lump, over ¾-inch screen.
242	.....do.....	.....do.....	.....do.....	.....do.....	Lump, over 2½-inch screen.

Government during the fiscal years 1916-1922—Continued.

UNITED STATES COALS—Continued.

Tons delivered.	Proximate analysis.					Calorific value per pound.						Number of analyses averaged.	Index No.
	As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
	Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
7	8	9	10	11	12	13	14	15	16	17	18	19	20
165	40.18	49.23	40.30	10.47	1.18	6,582	3,657	11,003	6,113	12,290	6,828	6	222
960	7.73	39.95	54.18	5.87	1.96	12,495	6,942	13,542	7,523	14,386	7,992	6	223
3,775	7.40	39.12	51.91	8.97	1.78	12,044	6,691	13,006	7,226	14,288	7,938	16	224
7,428	4.33	38.04	50.48	11.48	3.52	12,426	6,903	12,988	7,216	14,672	8,151	16	225
.....	1.63	22.30	61.75	15.95	.74	12,690	7,050	12,900	7,167	15,348	8,527	1	226
.....	4.00	21.60	60.45	17.95	.80	12,077	6,709	12,580	6,989	15,332	8,518	1	227
.....	2.55	38.30	55.00	6.70	1.00	13,624	7,569	13,980	7,767	14,981	8,323	1	228
.....	2.40	36.70	52.95	10.35	1.08	13,166	7,314	13,490	7,494	15,047	8,359	1	229
.....	4.75	36.50	54.00	9.50	1.03	12,968	7,204	13,615	7,564	15,044	8,358	1	230
.....	2.38	33.25	59.55	7.20	1.19	13,803	7,668	14,140	7,856	15,237	8,465	1	231
.....	2.38	38.50	52.82	8.68	.93	13,159	7,311	13,480	7,489	14,761	8,201	1	232
.....	.65	22.85	66.10	11.05	3.68	13,770	7,650	13,860	7,700	15,582	8,657	1	233
.....	.78	21.60	61.12	17.28	4.28	12,743	7,079	12,843	7,135	15,526	8,626	1	234
.....	3.05	19.23	66.57	14.20	.75	12,703	7,057	13,103	7,279	15,272	8,484	1	235
.....	1.70	17.65	73.00	9.35	.60	13,816	7,676	14,055	7,808	15,505	8,614	1	236
.....	1.95	15.80	60.30	23.90	.83	11,251	6,251	11,475	6,375	15,079	8,377	1	237
.....	1.95	17.15	69.60	13.25	.63	13,109	7,283	13,370	7,428	15,412	8,562	1	238
422	7.27	34.83	54.14	11.03	2.33	12,123	6,735	13,073	7,263	14,694	8,163	3	239
1,923	4.76	35.94	53.60	10.46	1.77	12,395	6,886	13,014	7,230	14,534	8,074	15	240
7,271	5.39	36.33	57.46	6.21	1.96	13,005	7,225	13,746	7,637	14,656	8,142	15	241
5,254	4.69	36.04	58.19	5.77	2.16	13,172	7,318	13,820	7,678	14,666	8,148	13	242

TABLE 1.—*Coals analyzed for the United States*
UNITED STATES COALS—Continued.

Index No.	Where mined.			Commercial name of coal.	Size of coal.
	State, county, and town.	Mine.	Bed.		
1	2	3	4	5	6
	OKLAHOMA—Continued.				
	PITTSBURG COUNTY.				
243	Carbon.....	No. 2.....	McAlester.....		Lump, over 2½-inch screen.
244	.....do.....	.....do.....	.....do.....		Nut, over 1½-inch and through 2½-inch screens.
245	.....do.....	.....do.....	.....do.....		Pea, over ¾-inch and through 1½-inch screen.
246	.....do.....	.....do.....	.....do.....		Slack, through ¾-inch screen.
247	Krebs.....	No. 5.....	.....do.....		Lump, over 2½-inch screen.
248	.....do.....	.....do.....	.....do.....		Nut, over 1½-inch and through 2½-inch screens.
249	.....do.....	.....do.....	.....do.....		Pea, over ¾-inch and through 1½-inch screens.
250	.....do.....	.....do.....	.....do.....		Slack, through ¾-inch screen.
	TULSA COUNTY.				
251	Broken Arrow....	Broken Arrow..			Lump.....
	PENNSYLVANIA.				
	ALLEGHENY COUNTY.				
252	Fair Haven.....	Fair Haven.....	Pittsburgh.....	Pittsburgh.....	Nut and slack.....
253	Pittsburgh.....	Squirrel Hill..	.....do.....	Youghiogheny..	Slack.....
	BEDFORD COUNTY.				
254	Six-Mile Run.....	Shreve Run, Nos. 1, 6, and 7.	Kelly.....	Rex.....	Run of mine.....
	CAMBRIA COUNTY.				
255	Barnesboro.....	Spangler, Nos. 3 and 4.	B and E.....		.....do.....
256	Beaverdale.....	Logan, No. 2....	B or Miller.....		.....do.....
257	.....do.....	.....do.....	.....do.....	Pure South Fork	.....do.....
258	.....do.....	Logan, No. 6½.	D or Lower Freeport.	Log Cabin.....	.....do.....
259	.....do.....	Pennsylvania, No. 15.	B or Miller.....		.....do.....
260	Cassandra.....	Hughes, No. 2..	.....do.....		.....do.....
261	Colver.....	Ebansburg, No. 1.	.....do.....	Colver.....	.....do.....
262	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
263	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
264	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
265	Dunio.....	Logan, No. 7....	E or Upper Freeport.		.....do.....
266	.....do.....	Yellow Run.....	B or Miller.....		.....do.....
267	Elmora.....	Sterling, No. 1.	.....do.....		.....do.....
268	.....do.....	Sterling, Nos. 3 and 5.	.....do.....		.....do.....
269	.....do.....	Sterling (mines).	.....do.....	Powelton.....	.....do.....
270	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....

Government during the fiscal years 1916-1922—Continued.

UNITED STATES COALS—Continued.

Tons delivered.	Proximate analysis.					Calorific value per pound.						Number of analyses averaged.	Index No.
	As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
	Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
7	8	9	10	11	12	13	14	15	16	17	18	19	20
.....	2.80	35.25	59.55	5.20	0.53	13,734	7,630	14,130	7,850	14,905	8,281	1	243
.....	2.65	34.65	55.65	9.70	.50	13,098	7,277	13,455	7,475	14,900	8,278	1	244
.....	2.85	33.75	54.10	12.15	.58	12,644	7,024	13,015	7,231	14,815	8,231	1	245
.....	4.00	32.25	48.80	18.95	.83	11,299	6,277	11,770	6,539	14,522	8,068	1	246
.....	2.55	36.75	58.50	4.75	.43	13,784	7,658	14,145	7,858	14,850	8,250	1	247
.....	2.55	35.50	57.80	6.70	.43	13,497	7,498	13,850	7,694	14,845	8,247	1	248
.....	2.50	35.40	55.30	9.30	.48	13,114	7,286	13,450	7,472	14,829	8,238	1	249
.....	2.65	35.30	55.10	9.60	.55	12,962	7,201	13,315	7,397	14,729	8,183	1	250
387	5.66	37.86	53.08	9.06	2.78	12,405	6,892	13,149	7,305	14,459	8,033	10	251
2,057	2.24	35.51	52.70	11.79	1.98	12,866	7,148	13,161	7,312	14,920	8,289	13	252
1,587	5.90	32.56	55.43	12.01	1.40	12,153	6,752	12,915	7,175	14,678	8,154	13	253
100	.83	16.00	72.92	11.08	1.69	13,719	7,622	13,834	7,686	15,558	8,643	1	254
100	3.06	23.99	65.42	10.59	1.33	13,477	7,487	13,902	7,723	15,549	8,638	1	255
.....	1.80	17.83	70.44	11.73	2.14	13,447	7,471	13,693	7,607	15,513	8,618	1	256
2,552	2.54	18.17	71.33	10.50	2.21	13,612	7,562	13,967	7,759	15,606	8,670	7	257
11,704	2.77	19.17	72.06	8.77	2.08	13,850	7,694	14,245	7,914	15,614	8,674	49	258
.....	1.65	18.25	72.42	9.33	1.98	13,877	7,709	14,110	7,839	15,562	8,646	1	259
.....	1.73	18.25	74.32	7.43	.94	14,242	7,912	14,493	8,052	15,656	8,698	1	260
65,030	1.85	23.00	70.13	6.87	1.56	14,298	7,943	14,567	8,093	15,642	8,690	256	261
61,614	1.82	22.54	70.36	7.10	1.36	14,284	7,936	14,549	8,083	15,661	8,701	208	262
102,585	2.45	23.09	70.83	6.08	1.30	14,353	7,974	14,713	8,174	15,665	8,703	134	263
80,675	2.07	22.80	71.62	5.58	1.16	14,482	8,046	14,788	8,216	15,662	8,701	111	264
.....	1.65	18.65	69.22	12.13	1.59	13,438	7,466	13,663	7,591	15,549	8,638	1	265
.....	1.55	17.90	75.20	6.90	1.11	14,359	7,977	14,585	8,103	15,666	8,703	1	266
.....	1.70	22.15	69.75	8.10	1.80	14,126	7,848	14,370	7,983	15,637	8,687	1	267
.....	2.00	23.35	67.90	8.75	1.68	13,960	7,756	14,245	7,914	15,611	8,673	1	268
17,502	2.71	23.33	68.73	7.94	1.66	14,001	7,778	14,391	7,995	15,632	8,684	12	269
15,186	2.30	22.53	69.27	8.20	1.76	14,019	7,788	14,349	7,972	15,631	8,684	9	270

TABLE 1.—*Coals analyzed for the United States*

UNITED STATES COALS—Continued.

Index No.	Where mined.			Commercial name of coal.	Size of coal.
	State, county, and town.	Mine.	Bed.		
1	2	3	4	5	6
	P E N N S Y L - V A N I A—Con.				
	CAMBRIA COUNTY— continued.				
271	Fallen Timber.....	Fallen Timber, No. 1.	E or Upper Free- port.	Colonial.....	Run of mine.....
272	Johnstown.....	Smokeless, No. 1.	C' or Upper Kit- tanning.	.....	do.....
273	Lilly.....	Sonman, No. 2.	B or Miller.....	.....	do.....
274	Llanfair.....	Henrietta, No. 2.	do.....	.....	do.....
275	Nanty Glo.....	Cardiff.....	do.....	Cardiff.....	do.....
276	do.....	Cardiff, No. 1.	do.....	do.....	do.....
277	do.....	Springfield, No. 1.	do.....	do.....	do.....
278	do.....	Springfield, No. 3.	do.....	do.....	do.....
279	Portage.....	Miller Shaft, No. 1.	do.....	South Fork.....	do.....
280	do.....	do.....	do.....	do.....	do.....
281	do.....	do.....	do.....	do.....	do.....
282	do.....	Sonman Run, No. 1.	D or Lower Free- port.	Sonman.....	do.....
283	St. Michaels.....	Maryland Shaft.	B or Miller.....	.....	do.....
284	Sonman.....	Sonman Shaft.	do.....	.....	do.....
285	South Fork.....	Argyle, No. 1.	do.....	.....	do.....
286	do.....	Argyle, No. 2.	do.....	.....	do.....
287	do.....	Riverside, No. 2.	C or Upper Kit- tanning.	.....	do.....
288	do.....	Stineman, No. 2.	B or Miller.....	.....	do.....
289	do.....	Stineman, No. 4.	B or Miller.....	.....	do.....
290	do.....	Stineman, Nos. 2 and 4; River- side, No. 2.	B or Miller; C' or Upper Kittan- ning.	Stineman or Riverside.	do.....
291	Twin Rocks.....	Commercial, Nos. 3, 4, and 5.	B or Miller.....	Star.....	do.....
292	do.....	do.....	do.....	do.....	do.....
293	do.....	do.....	do.....	do.....	do.....
294	do.....	Commercial, Nos. 3, 4, 5, and 15.	do.....	do.....	do.....
295	Vintondale.....	Vinton, No. 1.	do.....	.....	do.....
296	Windber.....	Eureka, No. 40.	do.....	.....	do.....
	CENTER COUNTY.				
297	Osceola Mills.....	Bear Run, No. 1.	A.....	Bear Run.....	do.....
	CLEARFIELD COUNTY.				
298	Hawk Run.....	Acme.....	B or Miller.....	Acme.....	do.....
299	Heverly.....	Vivian.....	C or Middle Kit- tanning.	Vivian.....	do.....
300	Houtzdale.....	Coalmont-Mo- shannon.	D or Moshannon	.....	do.....
	FAYETTE COUNTY.				
301	Melcroft.....	Melcroft, Nos. 1 and 2.	B or Miller.....	Melcroft.....	do.....
	INDIANA COUNTY.				
302	Clymer.....	Empire.....	do.....	Empire.....	do.....
303	do.....	do.....	do.....	do.....	do.....
304	do.....	do.....	do.....	do.....	do.....

Government during the fiscal years 1916-1922—Continued.

UNITED STATES COALS—Continued.

Tons delivered.	Proximate analysis.					Calorific value per pound.						Number of analyses averaged.	Index No.
	As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
		Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.			Calories.
7	8	9	10	11	12	13	14	15	16	17	18	19	20
6,657	2.23	25.83	65.86	8.31	1.28	13,980	7,767	14,299	7,944	15,595	8,664	12	271
250	3.36	16.06	70.88	13.06	2.52	13,029	7,238	13,482	7,490	15,507	8,615	5	272
-----	1.97	20.33	72.74	6.93	.63	14,205	7,892	14,490	8,050	15,569	8,649	1	273
-----	1.55	17.65	75.52	6.83	.80	14,323	7,957	14,548	8,082	15,614	8,674	1	274
-----	1.77	21.83	70.80	7.37	2.22	14,221	7,901	14,477	8,043	15,629	8,683	1	275
2,050	2.61	21.89	70.72	7.39	2.43	14,098	7,832	14,476	8,042	15,631	8,684	41	276
-----	1.50	19.80	73.07	7.13	1.60	14,331	7,962	14,550	8,083	15,667	8,704	1	277
-----	1.25	20.35	71.80	7.85	2.73	14,235	7,908	14,415	8,008	15,643	8,691	1	278
4,717	3.32	17.64	74.43	7.93	.75	13,916	7,731	14,394	7,997	15,634	8,686	15	279
6,305	4.24	17.29	73.72	8.99	.97	13,586	7,548	14,188	7,882	15,589	8,661	40	280
3,673	3.36	17.48	74.27	8.25	.92	13,839	7,688	14,320	7,956	15,608	8,671	10	281
200	1.97	19.38	70.22	10.40	2.85	13,636	7,576	13,910	7,728	15,525	8,625	3	282
-----	2.15	15.10	78.20	6.70	.88	14,306	7,948	14,620	8,122	15,670	8,706	1	283
-----	1.80	18.13	72.40	9.47	1.28	13,833	7,713	14,137	7,854	15,616	8,676	1	284
-----	1.78	17.95	75.90	6.15	1.06	14,478	8,043	14,740	8,189	15,706	8,726	1	285
-----	1.85	18.23	74.64	7.13	1.98	14,296	7,942	14,565	8,092	15,683	8,713	1	286
100	2.57	17.46	70.98	11.56	2.29	13,376	7,431	13,729	7,627	15,524	8,624	2	287
-----	1.00	18.83	74.37	6.80	1.53	14,403	8,082	14,548	8,002	15,609	8,672	1	288
-----	1.20	16.58	75.29	8.13	.75	14,178	7,877	14,350	7,972	15,620	8,678	1	289
3,500	2.21	19.34	72.30	8.36	1.75	13,953	7,752	14,268	7,927	15,570	8,650	7	290
4,852	2.51	21.86	71.56	6.58	1.61	14,269	7,927	14,636	8,131	15,667	8,704	20	291
6,966	2.18	21.56	71.59	6.85	1.91	14,287	7,937	14,605	8,114	15,679	8,710	28	292
11,163	2.31	21.69	71.30	7.01	2.10	14,222	7,901	14,558	8,088	15,655	8,697	162	293
2,296	1.56	22.33	70.79	6.88	1.94	14,334	7,963	14,561	8,089	15,637	8,687	198	294
-----	2.30	21.23	70.47	8.30	3.08	14,008	7,782	14,338	7,966	15,636	8,687	1	295
-----	1.78	16.65	75.35	8.00	1.40	14,142	7,857	14,398	7,999	15,650	8,695	1	296
700	1.36	23.06	61.76	15.18	4.33	12,906	7,170	13,084	7,269	15,426	8,570	5	297
7,099	3.44	22.06	67.44	10.50	2.33	13,402	7,446	13,879	7,711	15,507	8,615	57	298
2,638	4.18	22.02	68.72	9.26	1.30	13,536	7,520	14,126	7,848	15,568	8,649	19	299
543	5.35	21.30	64.68	14.02	1.10	12,380	6,878	13,080	7,267	15,213	8,452	12	300
850	2.21	25.65	63.57	10.78	2.22	13,535	7,519	13,841	7,689	15,513	8,618	13	301
5,427	3.12	27.80	63.23	8.97	2.11	13,724	7,624	14,166	7,870	15,567	8,648	91	302
851	3.43	29.37	62.09	8.54	2.09	13,651	7,584	14,136	7,853	15,456	8,587	15	303
3,616	4.61	27.64	64.30	8.06	1.83	13,603	7,557	14,260	7,922	15,510	8,617	26	304

TABLE 1.—*Coals analyzed for the United States*

UNITED STATES COALS—Continued.

Index No.	Where mined.			Commercial name of coal.	Size of coal.
	State, county, and town.	Mine.	Bed.		
1	2	3	4	5	6
	P E N N S Y L - V A N I A—Con.				
	SOMERSET COUNTY.				
305	Cairnbrook.....	Loyal Hanna, No. 6.	B or Miller (top bench).	Cairnbrook.....	Run of mine.....
306	.....do.....	Reitz, No. 2.....	B or Miller.....	.....do.....	.....do.....
307	.....do.....	Reitz, No. 3.....	.....do.....	Reitz.....	.....do.....
308	Elk Lick.....	Boynton, No. 9.	.....do.....	.....do.....	.....do.....
309	.....do.....	Chapman, Nos. 3 and 4.	Pittsburgh (Big Vein).	.....do.....	.....do.....
310	Hollsopple.....	Haws, Nos. 1, 2, and 3.	B or Miller, and C' or Upper Kittanning.	Victoria.....	.....do.....
311	.....do.....	Haws, No. 3.....	B or Miller.....	.....do.....	.....do.....
312	Hooversville.....	Somerset Creek, No. 1.	.....do.....	Somerset Creek.....	.....do.....
313	Jenner.....	Consolidation.....	C' or Upper Kit- tanning.	Jenner.....	.....do.....
314	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
315	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
316	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
317	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
318	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
319	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
320	Jerome.....	Jerome, Nos. 1 and 2.	.....do.....	Jerome.....	.....do.....
321	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
322	Listie.....	Stauffer, No. 1.....	E or Upper Free- port.	.....do.....	.....do.....
323	.....do.....	Stauffer, No. 3.....	D or Lower Freeport.	Stauffer.....	.....do.....
324	MacDonaldton.....	Pen Mar.....	B or Miller.....	Pen Mar.....	.....do.....
325	Rockwood.....	Rockwood.....	D or Lower Free- port.	.....do.....	.....do.....
326	Seanor.....	Eureka, No. 39.....	C' or Upper Kit- tanning.	.....do.....	.....do.....
327	Somerset.....	Ralphton, No. 2.....	E or Upper Free- port.	Ralphton.....	.....do.....
328	.....do.....	Ralphton, No. 15.....	B or Miller.....	.....do.....	.....do.....
329	Wellersburg.....	Rowe.....	Pittsburgh.....	Georges Creek.....	.....do.....
330	Windber.....	Reitz, Nos. 4 and 5.	B and C.....	Reitz.....	.....do.....
	WASHINGTON COUNTY.				
331	Meadowlands.....	Manifold and Enterprise.	Pittsburgh.....	Pittsburgh.....	Lump, over 2-inch bar screen.
	WESTMORELAND COUNTY.				
332	Delmont.....	Delmont.....	Pittsburgh.....	Delmont gas....	Lump, over $\frac{3}{4}$ -inch screen.
333	.....do.....	.....do.....	.....do.....	.....do.....	Run of mine.....
334	Wyano.....	Osborne.....	.....do.....	Youghiogheny.....	Slack.....
335	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
336	.....do.....	Osborne, Nos. 1 and 2.	.....do.....	.....do.....	Run of mine.....
	TENNESSEE.				
	ANDERSON COUNTY.				
337	Briceville.....	No. 1 and Volun- teer.	Coal Creek.....	.....do.....	.....do.....
338	Coal Creek.....	No. 1.....	.....do.....	.....do.....	.....do.....
339	Wind Rock.....	Wind Rock No. 1.....	Wind Rock.....	.....do.....	.....do.....

Government during the fiscal years 1916-1922—Continued.

UNITED STATES COALS—Continued.

Tons delivered.	Proximate analysis.					Calorific value per pound.						Number of analyses averaged.	Index No.
	As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
		Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.			Calories.
7	8	9	10	11	12	13	14	15	16	17	18	19	20
-----	1.60	16.70	75.50	7.80	0.83	14,165	7,869	14,395	7,997	15,613	8,674	1	305
-----	2.67	18.27	72.13	9.60	1.22	13,704	7,613	14,080	7,822	15,575	8,653	1	306
100	3.08	17.59	71.65	10.76	.91	13,472	7,484	13,900	7,722	15,576	8,653	2	307
50	2.60	18.25	68.90	12.85	2.03	13,242	7,357	13,595	7,553	15,600	8,667	1	308
650	5.63	22.45	70.10	7.45	.77	13,325	7,403	14,120	7,844	15,257	8,476	19	309
19,046	2.06	17.21	73.99	8.80	1.91	13,975	7,764	14,269	7,927	15,646	8,692	57	310
10,383	2.11	17.75	73.10	9.15	2.04	13,908	7,727	14,208	7,893	15,639	8,688	13	311
100	2.46	17.81	68.33	13.86	2.20	12,894	7,163	13,219	7,344	15,346	8,526	2	312
6,413	1.93	17.47	72.06	10.47	1.63	13,678	7,599	13,947	7,748	15,578	8,654	23	313
5,700	2.25	17.98	71.89	10.13	1.72	13,707	7,615	14,023	7,791	15,604	8,669	19	314
4,002	1.37	17.49	72.43	10.08	1.57	13,830	7,683	14,022	7,790	15,594	8,663	13	315
675	2.23	17.93	71.68	10.39	1.83	13,647	7,582	13,958	7,754	15,576	8,653	8	316
1,422	1.48	17.44	72.27	10.29	1.60	13,784	7,658	13,991	7,773	15,596	8,664	8	317
351	2.74	17.62	72.30	10.08	1.91	13,603	7,557	13,986	7,770	15,554	8,641	5	318
12,867	2.26	17.26	72.23	10.51	1.63	13,620	7,567	13,935	7,742	15,572	8,651	50	319
3,800	2.44	16.99	74.42	8.59	.85	13,947	7,748	14,296	7,942	15,639	8,688	76	320
2,275	4.04	17.09	73.14	9.77	1.02	13,492	7,496	14,060	7,811	15,582	8,657	43	321
200	1.98	19.41	66.94	13.65	1.51	13,044	7,247	13,307	7,393	15,411	8,562	4	322
100	2.08	20.62	68.81	10.57	1.75	13,506	7,503	13,793	7,663	15,423	8,568	2	323
259	2.85	17.40	70.57	12.03	2.33	13,193	7,329	13,580	7,544	15,437	8,576	6	324
150	1.77	19.22	67.46	13.32	1.21	13,181	7,323	13,419	7,455	15,481	8,601	2	325
-----	1.95	16.38	72.42	11.18	1.69	13,568	7,538	13,838	7,688	15,580	8,656	1	326
350	1.65	18.52	64.03	17.45	1.60	12,605	7,003	12,816	7,120	15,525	8,625	5	327
450	2.15	17.23	69.37	13.40	2.37	13,088	7,271	13,376	7,431	15,446	8,581	8	328
150	1.08	18.81	66.52	14.67	1.96	13,022	7,234	13,164	7,313	15,427	8,571	2	329
100	1.95	17.69	69.37	12.94	1.72	13,139	7,299	13,400	7,444	15,392	8,551	2	330
306	2.61	40.56	52.25	7.19	2.75	13,377	7,432	13,736	7,631	14,800	8,222	7	331
50	1.92	35.78	54.37	9.85	.94	13,358	7,421	13,619	7,566	15,107	8,393	1	332
50	1.76	35.67	54.22	10.11	1.24	13,344	7,413	13,583	7,546	15,111	8,395	1	333
1,039	5.08	34.77	55.61	9.62	1.37	12,967	7,204	13,661	7,589	15,115	8,397	11	334
1,102	6.36	34.62	54.73	10.65	1.54	12,490	6,939	13,338	7,410	14,928	8,293	12	335
525	3.24	35.89	56.40	7.71	1.52	13,436	7,464	13,886	7,714	15,046	8,359	7	336
300	1.65	35.95	55.59	8.46	1.28	13,647	7,582	13,876	7,709	15,158	8,421	1	337
700	1.55	35.58	54.68	9.74	1.17	13,442	7,468	13,654	7,586	15,127	8,404	1	338
650	2.01	35.67	54.66	9.67	.90	13,218	7,343	13,489	7,494	14,932	8,296	1	339

TABLE 1.—*Coals analyzed for the United States*
UNITED STATES COALS—Continued.

Index No.	Where mined.			Commercial name of coal.	Size of coal.
	State, county, and town.	Mine.	Bed.		
1	2	3	4	5	6
	TENNESSEE—Continued.				
	CAMPBELL COUNTY.				
340	Caryville.....	Bear Wallow, No 1.	Coal Creek.....	Bear Wallow....	Run of mine.....
341	do.....	Bear Wallow.....	do.....	do.....	do.....
342	Cotula.....	Cotula.....	Jellico.....	do.....	Lump, over 6-inch round screen.
343	do.....	do.....	do.....	do.....	Run of mine, through 6-inch round screen.
344	do.....	Wynn.....	Rich Mountain..	do.....	Lump, over 3-inch round screen.
345	do.....	do.....	do.....	do.....	Run of mine, through 3-inch round screen.
346	LaFollette.....	Rex, No. 1.....	Coal Creek.....	do.....	Lump, over 4-inch round screen.
347	do.....	do.....	do.....	do.....	Egg, 2½ by 4 inch round screen.
348	do.....	do.....	do.....	do.....	Slack, through 2½- inch round screen.
349	Red Ash.....	Indian Mountain	Jellico.....	do.....	Lump, over 3-inch bar screen.
350	do.....	do.....	do.....	do.....	Run of mine, through 3-inch bar screen.
351	Westbourne.....	Westbourne.....	Log Mountain 48 per cent and Jellico 52 per cent.	do.....	Lump, over 4½-inch round screen.
352	do.....	do.....	do.....	do.....	Run of mine, through 4½-inch round screen.
	CLAIBORNE COUNTY.				
353	Eagan.....	Eagan.....	Jellico.....	Buffalo.....	Lump, over 6-inch round and 5-inch bar screens.
354	do.....	do.....	do.....	do.....	Run of mine, through 6-inch round and 5-inch bar screens.
355	do.....	do.....	do.....	do.....	Run of mine, through 6-inch bar screen.
356	Fork Ridge.....	Fork Ridge.....	Mason.....	do.....	Run of mine.....
	GRUNDY COUNTY.				
357	Palmer.....	Palmer.....	Sewanee.....	do.....	do.....
	MARION COUNTY.				
358	Whitwell.....	Whitwell.....	Sewanee.....	Whitwell.....	do.....
359	do.....	do.....	do.....	do.....	Lump, over 1-inch round screen.
	MORGAN COUNTY.				
360	Petros.....	Big Brushy.....	Brushy Moun- tain.	do.....	Run of mine.....
	SCOTT COUNTY.				
361	Oneida.....	Fogal or Stanley, No. 5.	No. 4 or Paint Rock.	do.....	do.....

¹ Samples exposed to rain during collection and preparation.

Government during the fiscal years 1916-1922—Continued.

UNITED STATES COALS—Continued.

Tons delivered.	Proximate analysis.					Calorific value per pound.						Number of analyses averaged.	Index No.
	As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
	Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
7	8	9	10	11	12	13	14	15	16	17	18	19	20
200	1.75	36.78	55.54	7.68	0.90	13,721	7,623	13,965	7,758	15,127	8,404	1	340
5,117	2.20	35.84	57.32	6.84	.90	13,795	7,664	14,105	7,836	15,141	8,412	10	341
50	2.12	40.78	56.45	2.77	1.47	14,107	7,837	14,413	8,007	14,824	8,236	1	342
150	2.15	38.47	53.02	8.51	1.29	13,217	7,343	13,507	7,504	14,763	8,202	1	343
50	¹ 3.42	39.83	57.69	2.48	.82	14,055	7,808	14,553	8,085	14,923	8,291	1	344
50	¹ 4.54	38.17	52.73	9.10	1.02	12,853	7,141	13,464	7,480	14,812	8,229	1	345
150	2.50	39.24	57.70	3.06	.89	14,213	7,896	14,577	8,098	15,037	8,354	1	346
150	¹ 2.68	39.13	56.05	4.82	.92	13,868	7,704	14,250	7,917	14,972	8,318	1	347
350	¹ 3.32	34.22	49.63	16.15	1.09	11,992	6,662	12,404	6,891	14,793	8,218	1	348
150	3.33	40.45	56.05	3.50	1.09	13,848	7,693	14,325	7,958	14,845	8,247	1	349
150	3.23	36.35	55.03	8.62	1.02	12,972	7,207	13,405	7,447	14,669	8,149	1	350
300	2.35	39.59	56.23	4.18	1.05	14,004	7,780	14,341	7,967	14,967	8,315	1	351
400	2.53	37.71	54.46	7.83	1.21	13,385	7,436	13,732	7,629	14,899	8,277	1	352
250	¹ 4.63	39.33	58.03	2.64	.68	14,094	7,830	14,778	8,210	15,179	8,433	1	353
500	¹ 4.31	38.03	57.11	4.86	.96	13,714	7,619	14,332	7,962	15,064	8,369	1	354
1,362	3.00	37.20	53.45	9.35	1.39	13,229	7,349	13,638	7,577	15,045	8,358	4	355
1,350	2.01	37.31	54.21	8.48	1.54	13,347	7,415	13,620	7,567	14,882	8,268	1	356
13,200	5.22	28.60	58.77	12.63	1.03	12,535	6,964	13,225	7,347	15,137	8,409	70	357
2,846	1.85	29.93	61.40	8.67	.68	13,616	7,564	13,873	7,707	15,190	8,439	6	358
8,815	2.15	29.44	61.62	8.94	.66	13,521	7,512	13,818	7,677	15,175	8,431	20	359
75	1.63	36.78	54.48	8.64	3.26	13,475	7,486	13,698	7,610	14,993	8,329	1	360
50	2.94	34.81	56.10	9.09	.72	13,242	7,357	13,643	7,579	15,007	8,337	1	361

TABLE 1.—*Coals analyzed for the United States*

UNITED STATES COALS—Continued.

Index No.	Where mined.			Commercial name of coal.	Size of coal.
	State, county, and town.	Mine.	Bed.		
1	2	3	4	5	6
	TEXAS.				
	MAVERICK COUNTY.				
362	Eagle Pass.....	Lamar.....	Eagle Pass.....		Egg (washed).....
363	.....do.....	.....do.....	.....do.....		Run of mine.....
	WEBB COUNTY.				
364	Santo Tomas.....	Santo Tomas...	Santo Tomas...	Santo Tomas...	Lump, over 3-inch screen.
365	.....do.....	.....do.....	.....do.....	.....do.....	Lump, over 4½-inch screen.
	UTAH.				
	CARBON COUNTY.				
366	Hiawatha.....	Hiawatha.....	Book Cliff.....	Hiawatha.....	Lump.....
367	Kenilworth.....	Aberdeen.....	Aberdeen.....	Aberdeen.....	Egg, over 1½-inch and through 4½-inch screens.
368	Rains.....	Rains.....		Hi-heat.....	Egg, over 1½-inch and through 6-inch round screens.
369	Standardville.....	Standard.....	Castle Gate.....	Standard.....	Lump, over 4½-inch screen.
370	Sunnyside.....	Sunnyside.....	Sunnyside.....	Sunnyside.....	Lump, over 3-inch screen.
371	Winter Quarters...	Winter Quarters.	Pleasant Valley.	Pleasant Valley.	Lump, over 6-inch screen.
	EMERY COUNTY.				
372	Mohrland.....	Mohrland.....	Book Cliff.....	King.....	Lump.....
373	.....do.....	.....do.....	.....do.....	.....do.....	Run of mine.....
	EMERY AND CARBON COUNTIES.				
374	Mohrland and Kenilworth.	Mohrland and Aberdeen.	Book Cliff and Aberdeen.	King or Aberdeen.	Lump, over 4½-inch screen.
375	.....do.....	.....do.....	.....do.....	.....do.....	Run of mine.
	VIRGINIA.				
	DICKENSON COUNTY.				
376	Trammel.....	No. 2.....	Lower Banner.....		Lump, over 1½-inch bar screen.
377	.....do.....	.....do.....	.....do.....		Slack, through 1½-inch bar screen.
	LEE COUNTY.				
378	St. Charles.....	Bondurant.....	No. 5.....		Run of mine.....
379	.....do.....	Dominion.....	.....do.....		Lump, over 4-inch round screen.
380	.....do.....	.....do.....	.....do.....		Run of mine, through 4-inch round screen.
381	.....do.....	No. 1.....	.....do.....		Lump, over 1-inch bar screen.
382	Darbyville.....	Darbyville.....	.....do.....		Lump, over 4-inch round screen.
383	.....do.....	.....do.....	.....do.....		Egg, 1½-inch by 4-inch round screens
384	.....do.....	.....do.....	.....do.....		Slack (washed), through 3-inch, round screen.

Government during the fiscal years 1916-1922—Continued.

UNITED STATES COALS—Continued.

Tons delivered.	Proximate analysis.					Calorific value per pound.						Number of analyses averaged.	Index No.
	As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
	Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
7	8	9	10	11	12	13	14	15	16	17	18	19	20
409	7.01	35.35	40.23	24.42	1.00	9,879	5,488	10,624	5,902	14,057	7,809	9	362
600	6.26	30.97	35.71	33.32	.77	8,624	4,791	9,200	5,111	13,797	7,665	11	363
165	3.98	46.46	38.46	15.08	1.88	11,870	6,594	12,362	6,868	14,557	8,087	5	364
4,606	3.93	44.63	37.50	17.87	1.68	11,437	6,354	11,905	6,614	14,495	8,053	16	365
900	4.26	45.09	48.30	6.61	.63	12,881	7,156	13,454	7,474	14,406	8,003	7	366
933	4.51	42.99	50.71	6.30	.54	12,791	7,106	13,395	7,442	14,296	7,942	12	367
5,658	3.67	44.41	49.17	6.42	.48	13,012	7,229	13,508	7,504	14,435	8,019	24	368
690	3.19	45.71	47.38	6.91	.49	12,991	7,217	13,419	7,455	14,415	8,008	17	369
451	7.00	42.87	50.45	6.68	.69	12,247	6,804	13,169	7,316	14,112	7,840	6	370
800	6.37	44.50	49.34	6.16	.62	12,389	6,883	13,232	7,351	14,101	7,834	3	371
3,650	5.14	44.58	48.94	6.48	.66	12,746	7,081	13,437	7,465	14,368	7,982	9	372
2,815	5.19	44.10	48.77	7.13	.70	12,658	7,032	13,351	7,417	14,376	7,987	15	373
3,345	4.91	44.61	48.70	6.69	.70	12,727	7,071	13,384	7,436	14,344	7,969	11	374
2,000	4.88	44.78	48.41	6.81	.74	12,721	7,067	13,374	7,430	14,351	7,973	8	375
100	1.29	31.94	61.70	6.36	.71	14,309	7,949	14,496	8,053	15,481	8,601	1	376
150	1.21	31.42	58.24	10.34	.86	13,656	7,587	13,823	7,679	15,417	8,565	1	377
100	3.30	36.30	56.72	6.98	0.59	13,347	7,415	13,803	7,668	14,839	8,244	1	378
100	2.69	37.82	59.57	2.61	.52	14,191	7,884	14,583	8,102	14,974	8,319	1	379
150	3.42	35.36	56.40	8.24	.50	13,176	7,320	13,643	7,579	14,869	8,261	1	380
50	1.25	39.80	57.02	3.18	.51	14,220	7,900	14,400	8,000	14,873	8,263	1	381
100	2.40	37.19	59.59	3.22	.50	14,204	7,891	14,553	8,085	15,037	8,354	1	382
125	2.75	37.68	56.30	6.02	.49	13,683	7,602	14,070	7,817	14,971	8,317	1	383
100	5.69	36.63	59.88	3.49	.48	13,559	7,533	14,377	7,987	14,897	8,276	1	384

TABLE 1.—*Coals analyzed for the United States*

UNITED STATES COALS—Continued.

Index No.	Where mined.			Commercial name of coal.	Size of coal.
	State, county, and town.	Mine.	Bed.		
1	2	3	4	5	6
	VIRGINIA—Con.				
	TAZEWELL COUNTY.				
385	Pocahontas.....	Baby Pocahontas and West.	Pocahontas, No. 3.	.....	Run of mine.....
386	.....do.....	Big Vein, No. 1.	.....do.....	.....	do.....
387	.....do.....	Big Vein, No. 2.	.....do.....	.....	do.....
	WISE COUNTY.				
388	Appalachia (near).....	Inman.....	.....	Inman brand.....	do.....
389	Stonega.....	Stonega.....	.....	Stonega.....	do.....
	DICKENSON, RUSSELL, AND WISE COUNTIES.				
390	Dante (near).....	Clinchfield.....	Upper and Lower Banner.	Clinchfield.....	do.....
391	.....do.....	.....do.....	.....do.....	.....do.....	do.....
	WASHINGTON.				
	KING COUNTY.				
392	Briquettsville.....	.....	.....	Black Diamond briquets.	Briquets, 2½ by 3 inches.
393	.....do.....	.....	.....	do.....	do.....
394	Cumberland.....	Hyde.....	McKay.....	Hyde.....	60 per cent steam, washed, 40 per cent sludge.
395	Durham.....	Durham.....	Durham.....	Durham.....	Washed, steam.....
396	.....do.....	.....do.....	.....do.....	do.....	do.....
397	Newcastle.....	Newcastle.....	Muldoon.....	Newcastle.....	Lump, over ½-inch screen.
398	Newcastle and Issaquah.	Newcastle and Issaquah.	Muldoon and Alvo.	.....	do.....
	KITTITAS COUNTY.				
399	Roslyn.....	Beekman.....	Roslyn.....	Roslyn.....	Lump, over 1¼-inch screen.
400	.....do.....	Roslyn-Cascade, Nos. 1 and 2.	.....do.....	Roslyn-Cascade.	Lump, over 1½-inch screen.
	PIERCE COUNTY.				
401	Carbonado.....	Carbon Hill.....	.....	Carbonado.....	do.....
402	.....do.....	do.....	.....	do.....	do.....
403	.....do.....	do.....	.....	do.....	do.....
	WEST VIRGINIA.				
	BARBOUR COUNTY.				
404	Belington.....	Abbott.....	Kittanning.....	.....	Run of mine.....
	FAYETTE COUNTY.				
405	Beards Fork.....	Beards Fork.....	No. 2, gas.....	.....	do.....
406	Cannelton.....	Cannelton (mines).	.....do.....	Smithers Creek.....	do.....
407	Carbondale.....	No. 112.....	.....do.....	do.....	Lump, over ½-inch screen.
408	.....do.....	do.....	do.....	do.....	do.....

Government during the fiscal years 1916-1922—Continued.

UNITED STATES COALS—Continued.

Tons delivered.	Proximate analysis.					Calorific value per pound.						Number of analyses averaged.	Index No.
	As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
	Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
7	8	9	10	11	12	13	14	15	16	17	18	19	20
400	2.75	20.05	73.90	6.05	0.53	14,495	8,053	14,905	8,281	15,865	8,814	1	385
500	2.75	20.35	73.25	6.40	.58	14,218	7,899	14,620	8,122	15,620	8,678	1	386
450	4.50	21.65	71.95	6.40	.58	14,024	7,791	14,685	8,158	15,689	8,716	1	387
7,637	1.77	35.36	59.46	5.18	.71	14,236	7,909	14,493	8,052	15,285	8,492	91	388
4,757	1.95	33.42	56.83	9.75	.75	13,384	7,436	13,650	7,583	15,125	8,403	6	389
13,649	1.61	34.75	56.89	8.36	.60	13,892	7,718	14,119	7,844	15,407	8,559	51	390
11,243	1.74	34.99	56.46	8.55	.69	13,812	7,673	14,057	7,809	15,371	8,539	14	391
347	7.23	44.85	43.70	11.45	1.00	11,743	6,524	12,658	7,032	14,295	7,942	10	392
1,401	7.28	43.08	45.65	11.27	.93	11,713	6,507	12,633	7,018	14,238	7,910	18	393
1,627	9.14	38.33	45.87	15.80	.66	11,020	6,122	12,128	6,738	14,404	8,002	9	394
4,620	4.63	32.43	50.62	16.95	.81	11,744	6,524	12,314	6,841	14,827	8,237	24	395
2,913	6.15	30.85	50.63	18.52	.79	11,339	6,299	12,082	6,712	14,828	8,238	17	396
2,274	13.16	39.38	45.11	15.51	.81	9,963	5,535	11,473	6,374	13,579	7,544	5	397
4,387	13.03	40.98	43.94	15.08	.74	10,025	5,569	11,527	6,404	13,574	7,541	19	398
1,095	3.34	36.79	46.97	16.24	.39	12,169	6,761	12,589	6,994	15,030	8,350	7	399
3,592	4.06	38.23	48.24	13.53	.40	12,309	6,838	12,830	7,128	14,838	8,243	28	400
990	5.78	37.61	50.58	11.81	.60	12,312	6,840	13,067	7,259	14,817	8,232	12	401
600	3.45	37.93	50.02	12.05	.56	12,703	7,057	13,157	7,309	14,960	8,311	6	402
1,012	4.10	34.96	49.52	15.52	.58	12,030	6,683	12,544	6,969	14,848	8,249	5	403
50	2.34	28.77	51.62	19.61	1.83	11,951	6,639	12,237	6,798	15,222	8,457	1	404
900	1.27	33.79	58.89	7.32	.83	14,096	7,831	14,277	7,932	15,405	8,558	1	405
21,793	2.31	35.43	57.64	6.93	1.13	13,879	7,711	14,207	7,893	15,265	8,481	24	406
2,336	1.80	37.04	57.59	5.37	.95	14,260	7,922	14,521	8,067	15,345	8,525	25	407
1,070	1.96	36.20	58.85	4.95	1.04	14,293	7,941	14,579	8,099	15,338	8,521	11	408

TABLE 1.—*Coals analyzed for the United States*

UNITED STATES COALS—Continued.

Index No.	Where mined.			Commercial name of coal.	Size of coal.
	State, county, and town.	Mine.	Bed.		
1	2	3	4	5	6
	WEST VIRGINIA—Cont'd.				
	FAYETTE COUNTY—continued.				
409	Derryhale.....	Derryhale.....	Sewell.....	New River smokeless.	Run of mine.....
410	Dunloop.....	Dunloop.....	do.....	do.....	do.....
411	Glen Jean.....	Nichol.....	do.....	do.....	do.....
412	Ingram Branch....	Ingram Branch.	Eagle.....	do.....	do.....
413	Kilsyth.....	Fay Ral.....	Sewell.....	New River smokeless.	do.....
414	do.....	Kilsyth.....	do.....	do.....	do.....
415	Layland.....	Layland, Nos. 1, 2, 3, and 4.	Fire Creek.....	do.....	do.....
416	Lick Fork.....	Lick Fork.....	No. 2, gas, 70 per cent; Big Eagle, 30 per cent.	do.....	do.....
417	do.....	do.....	No. 2, gas, 63 per cent; Big Eagle, 37 per cent.	do.....	do.....
418	Lochgelly.....	Lochgelly.....	Sewell.....	New River smokeless.	do.....
419	Long Branch.....	Long Branch, Nos. 1 and 2.	Upper Eagle, 77 per cent; Lower Eagle, 23 per cent.	do.....	do.....
420	Minden.....	Minden (mines).	Sewell.....	do.....	do.....
421	do.....	Rock Lick, No. 4	do.....	do.....	do.....
422	do.....	Rock Lick, Nos. 2 and 4.	Fire Creek and Sewell.	do.....	do.....
423	Mount Hope.....	Catherine.....	Sewell.....	do.....	do.....
424	do.....	Hi Top.....	do.....	do.....	do.....
425	do.....	Lee.....	do.....	do.....	do.....
426	do.....	Minnie Bell.....	do.....	do.....	do.....
427	do.....	Sugar Creek.....	do.....	do.....	do.....
428	do.....	do.....	do.....	do.....	do.....
429	do.....	Warner.....	do.....	do.....	do.....
430	Newlyn.....	Dun Glen.....	do.....	do.....	do.....
431	do.....	Newlyn.....	Fire Creek.....	do.....	do.....
432	Oakwood.....	Oakwood.....	Sewell.....	do.....	do.....
433	Page.....	Glencoe.....	Anstead.....	do.....	do.....
434	do.....	Page.....	Eagle, 51 per cent; Anstead, 49 per cent.	do.....	do.....
435	Pax.....	Packs Branch..	Upper Eagle....	do.....	do.....
436	Red Star.....	Star.....	Sewell.....	New River smokeless.	do.....
437	Red Star and Caperton.	Star and Southside.	do.....	do.....	do.....
438	Scarbro.....	Scarbro.....	do.....	do.....	do.....
439	Smithers.....	Oakland.....	Eagle, No. 1.....	Richwood.....	do.....
440	Summerlee.....	Summerlee.....	Sewell.....	New River smokeless.	do.....
441	Sun.....	Sun.....	do.....	do.....	do.....
442	Sunset.....	Sunset.....	do.....	do.....	do.....
443	Thayer.....	Ridgeview.....	Fire Creek.....	do.....	do.....
444	Thurmond.....	Rock Lick, No. 2	do.....	do.....	do.....
445	Whipple.....	Whipple.....	Sewell.....	do.....	do.....
446	Willis Branch.....	Willis Branch..	Alma.....	do.....	do.....
447	Winona.....	Smokeless and Dubree.	Sewell.....	New River smokeless.	Nut and slack.

Government during the fiscal years 1916-1922—Continued.

UNITED STATES COALS—Continued.

Tons delivered.	Proximate analysis.					Calorific value per pound.						Number of analyses averaged.	Index No.
	As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
		Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.			Calories.
7	8	9	10	11	12	13	14	15	16	17	18	19	20
150	2.03	22.65	72.32	5.03	0.85	14,529	8,072	14,830	8,239	15,615	8,675	1	409
200	1.77	23.63	71.65	4.72	1.16	14,622	8,123	14,887	8,271	15,625	8,681	1	410
250	1.70	22.16	72.59	5.25	.76	14,478	8,043	14,728	8,182	15,544	8,636	1	411
700	1.84	29.70	61.94	8.36	.99	13,844	7,691	14,104	7,836	15,391	8,551	1	412
12	2.28	23.80	69.99	6.21	2.45	14,303	7,946	14,637	8,132	15,606	8,670	1	413
350	2.02	22.84	71.20	5.96	.97	14,328	7,960	14,623	8,124	15,550	8,639	1	414
450	1.75	20.30	73.65	6.05	.63	14,364	7,980	14,620	8,122	15,561	8,645	1	415
225	2.97	31.37	60.73	7.90	1.20	13,670	7,594	14,088	7,827	15,296	8,498	1	416
350	2.19	30.08	58.76	11.16	1.16	13,308	7,393	13,606	7,559	13,315	8,508	1	417
300	1.86	26.75	68.30	4.95	.56	14,400	8,000	14,754	8,197	15,522	8,623	1	418
800	2.15	28.08	63.47	8.45	.86	13,949	7,749	14,255	7,919	15,571	8,651	1	419
600	2.00	24.25	71.15	4.60	.58	14,548	8,082	14,845	8,247	15,561	8,645	1	420
400	1.83	25.68	70.27	4.05	.49	14,728	8,182	15,003	8,335	15,636	8,687	1	421
400	2.15	24.95	71.60	3.45	.48	14,712	8,173	15,035	8,353	15,572	8,651	1	422
25	4.55	22.06	70.81	7.13	1.03	13,277	7,376	13,910	7,728	14,978	8,321	1	423
50	2.36	21.78	73.87	4.35	.83	14,552	8,084	14,904	8,280	15,582	8,657	1	424
50	1.58	23.97	69.26	6.77	1.33	14,340	7,967	14,570	8,094	15,628	8,682	1	425
25	2.25	22.33	72.93	4.74	1.32	14,468	8,038	14,801	8,223	15,537	8,632	1	426
250	1.57	22.33	72.42	5.25	1.04	14,509	8,061	14,740	8,189	15,557	8,643	1	427
250	3.28	21.76	72.78	5.46	.87	14,291	7,939	14,776	8,209	15,629	8,683	5	428
30	1.92	21.79	68.65	9.56	1.86	13,763	7,646	14,032	7,796	15,515	8,619	1	429
200	4.49	21.04	74.75	4.21	.59	14,163	7,868	14,829	8,238	15,481	8,601	7	430
650	3.11	22.05	74.42	3.53	.66	14,700	8,167	15,172	8,429	15,727	8,737	13	431
500	1.71	23.45	70.72	5.83	1.01	14,322	7,957	14,571	8,095	15,473	8,596	1	432
36	2.46	32.47	58.55	8.98	2.15	13,644	7,580	13,988	7,771	15,368	8,538	1	433
600	1.34	31.70	58.49	9.81	1.41	13,605	7,558	13,790	7,961	15,290	8,494	1	434
100	1.62	25.91	61.58	12.51	1.15	13,256	7,364	13,474	7,486	15,401	8,556	1	435
11,299	2.77	22.94	71.97	5.09	.71	14,442	8,023	14,853	8,252	15,650	8,695	39	436
3,903	2.11	23.56	70.79	5.65	.93	14,429	8,016	14,740	8,189	15,623	8,679	18	437
400	1.68	22.82	72.13	5.05	.95	14,530	8,072	14,778	8,210	15,564	8,647	1	438
2,198	3.56	33.68	57.46	8.86	1.32	13,367	7,426	13,860	7,700	15,207	8,448	22	439
350	1.58	26.84	68.94	4.22	.70	14,672	8,151	14,907	8,282	15,564	8,647	1	440
650	1.42	21.15	72.69	6.16	1.03	14,370	7,983	14,577	8,098	15,534	8,630	1	441
50	2.05	22.24	71.85	5.91	.74	14,355	7,975	14,655	8,142	15,575	8,653	1	442
400	3.80	20.60	73.14	6.26	.62	14,120	7,844	14,678	8,154	15,658	8,699	8	443
200	2.10	21.88	71.59	6.53	.51	14,396	7,998	14,705	8,169	15,733	8,741	1	444
350	1.87	24.36	71.12	4.52	.74	14,578	8,099	14,856	8,253	15,559	8,644	1	445
50	3.30	28.86	60.54	10.60	.71	13,381	7,434	13,838	7,688	15,479	8,599	1	446
300	2.72	28.02	65.14	6.84	.68	14,017	7,787	14,409	8,005	15,467	8,593	3	447

TABLE 1.—*Coals analyzed for the United States*

UNITED STATES COALS—Continued.

Index No.	Where mined.			Commercial name of coal.	Size of coal.
	State, county, and town.	Mine.	Bed.		
1	2	3	4	5	6
	WEST VIRGINIA—Contd.				
	GRANT COUNTY.				
448	Bayard.....	Culpepper.....	Lower Kittanning.	Culpepper.....	Run of mine.....
	KANAWHA COUNTY.				
449	Putney.....	Campbell Creek.	No. 5, block.....		Nut and slack (washed).
450	Standard.....	Standard.....	Coalburgh.....	Standard.....	Nut, pea, and slack.
	LOGAN COUNTY.				
451	Craneco.....	Lorado, Nos. 1 and 2.	Cedar Grove or Island Creek.	Lorain white ash.	Lump over 1½-inch shaker screen.
452	.....do.....	.....do.....	.....do.....	.....do.....	Lump over 1½-inch shaker screen.
453	.....do.....	.....do.....	.....do.....	Lorado.....	Lump over 1-inch screen.
454	Omar.....	Maine Island (mines).	.....do.....	West Virginia splint.	Slack through 1½-inch screen.
455	Yolyn.....	Paragon, Nos. 1 and 2 and Cub Fork.	Chilton.....	Paragon and Cub Fork.	Run of mine.....
456	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
	M'DOWELL COUNTY.				
457	Arlington.....	Arlington.....	Pocahontas, No. 3.	Pocahontas smokeless.	.....do.....
458	Bear Wallow.....	Roanoke.....	.....do.....	.....do.....	.....do.....
459	Berwind.....	Berwind, No. 1.	.....do.....	.....do.....	.....do.....
460	.....do.....	Berwind, No. 2.	.....do.....	.....do.....	.....do.....
461	.....do.....	Berwind, No. 3.	.....do.....	.....do.....	.....do.....
462	.....do.....	Berwind, No. 4.	.....do.....	.....do.....	.....do.....
463	Big Sandy.....	Big Sandy.....	Sewell.....	.....do.....	.....do.....
464	Coalwood.....	Olga.....	Pocahontas, No. 4.	.....do.....	.....do.....
465	Davy.....	Blackstone or Superior Pocahontas, No. 1.	Davy-Sewell.....	.....do.....	.....do.....
466	.....do.....	Davy Crockett (Superior Pocahontas, No. 2); Helena (Superior Pocahontas, No. 3).	.....do.....	.....do.....	.....do.....
467	.....do.....	Davy Crockett (Superior Pocahontas, No. 2).	.....do.....	.....do.....	.....do.....
468	.....do.....	Helena (Superior Pocahontas, No. 3).	.....do.....	.....do.....	.....do.....
469	.....do.....	Cletus (Superior Pocahontas, No. 4).	.....do.....	.....do.....	.....do.....
470	.....do.....	Superior Pocahontas (mines).	.....do.....	.....do.....	.....do.....
471	Eckman.....	Pulaski, No. 2...	Pocahontas, No. 3.	.....do.....	.....do.....
472	.....do.....	Shawnee.....	.....do.....	.....do.....	.....do.....
473	Elkhorn (near).....	Crozer (mines).....	.....do.....	.....do.....	.....do.....

Government during the fiscal years 1916-1922—Continued.

UNITED STATES COALS—Continued.

Tons delivered.	Proximate analysis.					Caloric value per pound.						Number of analyses averaged.	Index No.
	As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
		Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.			Calories.
7	8	9	10	11	12	18	14	15	16	17	18	19	20
100	1.74	17.27	65.93	16.80	2.10	12,740	7,078	12,966	7,203	15,584	8,658	1	448
2,137	5.35	35.64	55.79	8.57	.88	12,903	7,168	13,632	7,573	14,910	8,283	19	449
9,457	3.50	33.16	57.84	9.00	.89	13,367	7,426	13,852	7,696	15,222	8,457	24	450
2,200	2.16	35.49	59.36	5.15	.90	14,270	7,928	14,585	8,103	15,377	8,543	8	451
2,635	1.97	34.30	61.29	4.41	.64	14,419	8,011	14,709	8,172	15,388	8,549	9	452
1,128	1.59	33.01	60.88	6.11	.66	14,211	7,895	14,441	8,023	15,381	8,545	16	453
7,799	10.11	32.72	56.65	10.63	1.26	11,853	6,585	13,186	7,326	14,754	8,197	23	454
16,053	2.88	35.02	57.84	7.14	.77	13,700	7,611	14,106	7,837	15,191	8,439	17	455
16,907	2.17	34.67	57.85	7.48	.78	13,758	7,643	14,063	7,813	15,200	8,444	37	456
760	3.45	18.05	74.25	7.70	.55	14,014	7,786	14,515	8,064	15,726	8,737	1	457
680	2.50	18.20	72.65	9.15	.40	13,943	7,746	14,300	7,944	15,740	8,744	1	458
-----	1.23	18.60	74.70	6.70	.85	14,494	8,052	14,675	8,153	15,729	8,738	1	459
450	2.90	17.95	71.85	10.20	.80	13,575	7,542	13,980	7,767	15,568	8,649	1	460
680	2.60	19.30	72.45	8.25	.80	14,108	7,838	14,485	8,047	15,787	8,771	1	461
560	2.85	19.60	72.65	7.75	.80	14,092	7,829	14,505	8,058	15,724	8,736	1	462
-----	1.75	19.68	75.29	5.03	.56	14,657	8,143	14,918	8,288	15,708	8,727	1	463
700	1.24	16.94	74.22	8.84	.71	14,072	7,818	14,249	7,916	15,631	8,684	2	464
550	3.20	18.25	75.90	5.85	.55	14,220	7,900	14,690	8,161	15,603	8,668	1	465
500	2.45	19.50	72.05	8.45	.58	13,950	7,750	14,300	7,944	15,620	8,678	1	466
-----	1.73	18.88	71.84	9.28	.59	13,962	7,757	14,208	7,893	15,661	8,701	1	467
-----	2.13	19.95	73.52	6.53	.70	14,370	7,983	14,683	8,157	15,709	8,727	1	468
350	2.25	18.35	75.15	6.50	.48	14,276	7,931	14,605	8,114	15,620	8,678	1	469
3,964	1.57	18.61	75.13	6.26	.63	14,495	8,053	14,726	8,181	15,709	8,727	15	470
650	2.35	17.40	75.55	7.05	.53	14,159	7,866	14,500	8,056	15,600	8,667	1	471
560	2.80	16.70	73.50	9.80	.53	13,715	7,619	14,110	7,839	15,643	8,691	1	472
13,001	2.86	21.07	72.94	5.99	.85	14,286	7,937	14,707	8,171	15,644	8,691	9	473

TABLE 1.—*Coals analyzed for the United States*

UNITED STATES COALS—Continued.

Index No.	Where mined.			Commercial name of coal.	Size of coal.
	State, county, and town.	Mine.	Bed.		
1	2	3	4	5	6
	WEST VIRGINIA—Contd.				
	M'DOWELL COUNTY—continued.				
474	Elkhorn (near)	Houston, Nos. 1 and 2.	Pocahontas, No. 3.	Pocahontas, smokeless.	Run of mine
475	Gilliam	Gilliam	do	do	do
476	Hartwell	Berwind, No. 5.	do	do	do
477	Havaco	Havaco	do	do	do
478	Jenkinjones	Jenkinjones, No. 6 (Pocahontas No. 6).	do	do	do
479	do	Jenkinjones, No. 7 (Pocahontas No. 7).	do	do	do
480	do	Jenkinjones, No. 8 (Pocahontas No. 8).	do	do	do
481	Kimball (Vivian)	Carswell	Pocahontas, Nos. 3 and 4.	do	do
482	Leckie	Leckie	Pocahontas, No. 3.	do	do
483	do	do	do	do	do
484	Lick Branch	Delta	do	do	do
485	McDowell	McDowell	do	do	do
486	Marytown	Marytown	Davy-Sewell	do	do
487	Newhall	Berwind, No. 6.	Pocahontas, No. 3.	do	do
488	do	Berwind, No. 7.	do	do	do
489	do	Berwind, No. 8.	do	do	do
490	Premier	Premier-Pocahontas, No. 1.	Welch	do	do
491	do	Premier-Pocahontas, No. 2.	Sewell	do	do
492	do	Premier-Pocahontas, No. 3.	Welch	do	do
493	do	Premier-Pocahontas, No. 4.	do	do	do
494	do	do	do	do	do
495	Twin Branch	J. B. B., No. 1	Davy-Sewell	do	do
496	do	J. B. B., No. 3	do	do	do
497	do	J. B. B., No. 4	do	do	Slack
498	do	J. B. B., Nos. 1, 2, 4, and 5.	do	do	Run of mine
499	Vivian	King	Pocahontas, No. 3.	do	do
500	do	Tidewater	do	do	do
501	do	Various mines	do	do	do
502	do	do	do	do	Screenings
503	do	do	do	do	Run of mine
	MARION COUNTY.				
504	Fairmont	Consolidation (mines).	Pittsburgh	Fairmont gas	do
	MERCER COUNTY.				
505	Algonquin	Algonquin	Pocahontas, No. 3.	Pocahontas smokeless.	do
506	America	America	do	do	do
507	Coaldale	Coaldale	do	do	do
508	Coopers	Mill Creek	do	do	do
509	Crystal	Crystal, No. 1	do	do	Egg (picked)

Government during the fiscal years 1916-1922—Continued.

UNITED STATES COALS—Continued.

Tons delivered.	Proximate analysis.					Calorific value per pound.						Number of analyses averaged.	Index No.
	As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
		Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.			Calories.
7	8	9	10	11	12	13	14	15	16	17	18	19	20
700	2.75	17.05	71.25	11.70	0.45	13,416	7,453	13,795	7,664	15,623	8,679	1	474
680	2.30	17.55	74.50	7.95	.40	14,123	7,846	14,458	8,032	15,703	8,724	1	475
480	2.15	18.95	71.45	9.60	.68	13,963	7,757	14,270	7,928	15,785	8,769	1	476
640	2.75	16.10	75.45	8.45	.80	13,897	7,721	14,290	7,939	15,609	8,672	1	477
680	2.80	21.50	72.60	5.90	.50	14,434	8,019	14,850	8,250	15,781	8,767	1	478
600	3.25	21.75	71.00	7.25	.48	14,145	7,858	14,620	8,122	15,763	8,757	1	479
600	3.40	22.80	69.80	7.40	.45	14,137	7,854	14,635	8,131	15,805	8,781	1	480
500	2.55	16.50	74.85	8.65	.50	13,984	7,769	14,350	7,972	15,709	8,727	1	481
2,179	2.93	19.60	73.96	6.44	.65	14,249	7,916	14,679	8,155	15,689	8,716	12	482
779	3.30	18.79	74.75	6.46	.63	14,210	7,894	14,695	8,164	15,710	8,728	8	483
900	3.20	18.10	74.15	7.75	.48	14,094	7,830	14,560	8,089	15,733	8,768	1	484
700	2.45	17.90	71.85	10.25	.48	13,740	7,633	14,085	7,825	15,694	8,719	1	485
-----	2.30	18.58	75.12	6.30	.62	14,362	7,979	14,700	8,167	15,688	8,716	1	486
-----	2.60	16.55	73.95	9.50	.68	13,811	7,673	14,183	7,879	15,669	8,705	1	487
680	2.50	16.90	73.10	10.00	.85	13,801	7,667	14,155	7,864	15,728	8,738	1	488
620	2.55	16.95	75.30	7.75	.55	14,223	7,902	14,595	8,108	15,821	8,789	1	489
450	2.05	17.90	71.90	10.20	.50	13,693	7,607	13,980	7,767	15,568	8,649	1	490
1,020	2.33	18.68	75.02	6.30	.53	14,289	7,938	14,630	8,128	15,614	8,674	2	491
520	2.85	18.30	74.35	7.35	.65	14,082	7,823	14,495	8,053	15,645	8,692	1	492
-----	1.98	18.43	74.72	6.85	.48	14,373	7,985	14,663	8,146	15,741	8,745	1	493
770	3.60	17.90	74.00	8.10	.58	13,920	7,733	14,440	8,022	15,713	8,729	1	494
600	2.60	19.60	73.65	6.75	.63	14,245	7,914	14,625	8,125	15,684	8,713	1	495
600	3.15	18.65	75.15	6.20	.63	14,271	7,928	14,735	8,186	15,709	8,727	1	496
640	3.95	20.30	74.85	4.85	.55	14,388	7,993	14,980	8,322	15,744	8,747	1	497
-----	1.63	19.85	75.12	5.03	.63	14,729	8,183	14,973	8,318	15,766	8,759	1	498
660	1.95	17.00	74.55	8.45	.50	14,129	7,849	14,410	8,006	15,740	8,744	1	499
700	1.65	16.80	74.10	9.10	.58	14,020	7,789	14,255	7,919	15,682	8,712	1	500
113,184	2.16	18.04	75.30	6.66	.58	14,363	7,982	14,685	8,158	15,733	8,741	71	501
7,515	5.19	18.60	74.82	6.58	.64	13,841	7,689	14,599	8,111	15,627	8,682	29	502
211,265	2.70	17.73	75.29	6.98	.57	14,229	7,905	14,624	8,124	15,721	8,734	153	503
2,309	1.82	38.28	56.00	5.72	.76	14,044	7,802	14,304	7,947	15,172	8,429	5	504
50	1.69	17.30	74.62	8.08	.56	14,135	7,853	14,378	7,988	15,642	8,690	1	505
300	2.23	16.95	74.38	8.67	.75	13,993	7,774	14,312	7,951	15,671	8,706	1	506
-----	2.78	19.88	73.69	6.43	.64	14,291	7,939	14,700	8,167	15,710	8,728	1	507
550	3.35	20.45	74.15	5.40	.58	14,391	7,995	14,890	8,272	15,740	8,744	1	508
-----	2.18	16.79	72.94	10.27	.60	13,715	7,619	14,021	7,789	15,626	8,681	1	509

TABLE 1.—*Coals analyzed for the United States*

UNITED STATES COALS—Continued.

Index No.	Where mined.			Commercial name of coal.	Size of coal.
	State, county, and town.	Mine.	Bed.		
1	2	3	4	5	6
	WEST VIRGINIA—Contd.				
	MERCER COUNTY—continued.				
510	Crystal.....	Crystal, No. 2...	Pocahontas No. 3.	Pocahontas smokeless.	Run of mine (picked).
511	McComas.....	Sagamore, Nos. 1 and 2.	do.	do.	do.
512	do.	Thomas No. 1.	do.	do.	Run of mine (screened).
513	Matoaka.....	Thomas, No. 2.	do.	do.	Run of mine (picked).
514	Simmons (P. O. Freeman).	Booth Bowen.	do.	do.	Run of mine.
515	do.	Buckeye, No. 2.	Pocahontas, No. 6.	do.	do.
516	Weyanoke.....	Weyanoke, No. 1.	Pocahontas, No. 3.	do.	do.
	MINERAL COUNTY.				
517	Elk Garden.....	Deep Run, Big Vein.		Georges Creek.	do.
	MINGO COUNTY.				
518	Glen Alum.....	Glen Alum.....	Lower Cedar Grove.	Thacker.....	Lump, over 3-inch screen.
	RALEIGH COUNTY.				
519	Abney.....	Boone smokeless.	Fire Creek.....	New River smokeless.	Run of mine.....
520	Affinity.....	Affinity.....	Beckley.....	do.	do.
521	do.	do.	do.	do.	do.
522	do.	do.	do.	do.	do.
523	do.	do.	do.	do.	do.
524	do.	do.	do.	do.	do.
525	do.	do.	do.	do.	do.
526	do.	Phillips.....	do.	do.	do.
527	do.	do.	do.	do.	do.
528	do.	Wat-Wise.....	do.	do.	do.
529	Amigo.....	Amigo.....	Pocahontas, No. 3.	Pocahontas smokeless.	do.
530	do.	do.	do.	do.	do.
531	do.	do.	do.	do.	do.
532	do.	do.	do.	do.	do.
533	Beckley.....	Beckley.....	Sewell.....	New River smokeless.	do.
534	do.	City, No. 1.....	do.	do.	do.
535	do.	City, No. 2.....	do.	do.	do.
536	Besoco.....	Beckley smokeless.	Beckley.....	do.	do.
537	do.	Clyde Pocahontas.	Pocahontas, No. 3.	Pocahontas smokeless.	do.
538	do.	do.	do.	do.	do.
539	Big Stick.....	Big Stick.....	Beckley.....	New River smokeless.	do.
540	do.	do.	do.	do.	do.
541	do.	do.	do.	do.	do.
542	do.	do.	do.	do.	do.
543	do.	do.	do.	do.	do.
544	Cepee.....	C. P. Callaway.	Sewell.....	do.	do.
545	East Gulf.....	C. H. Mead, No. 1.	Beckley.....	do.	do.
546	Eccles.....	Eccles, No. 3.	do.	do.	do.

Government during the fiscal years 1916-1922—Continued.

UNITED STATES COALS—Continued.

Tons delivered.	Proximate analysis.					Calorific value per pound.					Number of analyses averaged.	Index No.	
	As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
	Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.			Calories.
7	8	9	10	11	12	13	14	15	16	17	18	19	20
.....	2.55	17.58	70.54	11.88	0.78	13,499	7,499	13,852	7,696	15,719	8,733	1	510
560	4.85	18.30	74.90	6.80	.55	13,859	7,699	14,565	8,092	15,628	8,682	1	511
.....	2.37	17.00	71.78	11.22	.63	13,564	7,536	13,893	7,718	15,649	8,694	1	512
.....	3.06	16.71	67.91	15.38	0.53	12,817	7,121	13,222	7,346	15,625	8,681	1	513
980	3.25	18.50	73.30	8.20	.55	13,859	7,699	14,325	7,958	15,605	8,669	1	514
400	3.45	19.40	75.45	5.15	.63	14,347	7,971	14,860	8,256	15,667	8,704	1	515
600	3.05	17.25	74.30	8.45	.50	13,990	7,772	14,430	8,017	15,762	8,757	1	516
3,296	4.08	19.30	70.15	10.55	1.03	13,110	7,283	13,668	7,593	15,280	8,489	6	517
330	2.33	35.93	58.09	5.98	.78	13,984	7,769	14,318	7,954	15,229	8,461	6	518
50	2.26	17.42	71.55	11.03	1.64	13,562	7,534	13,876	7,709	15,596	8,664	1	519
400	2.90	17.00	74.90	8.10	.73	13,895	7,719	14,310	7,950	15,571	8,651	1	520
250	1.82	17.66	74.63	7.71	.58	14,203	7,891	14,466	8,037	15,674	8,708	1	521
100	2.49	17.97	74.58	7.45	.75	14,141	7,856	14,502	8,057	15,669	8,705	1	522
50	.....	.....	.....	6.79	.....	.....	.....	.....	.....	.....	.....	1	523
50	.....	.....	.....	7.21	.....	.....	.....	.....	.....	.....	.....	1	524
50	.....	.....	.....	8.88	.....	.....	.....	.....	.....	.....	.....	1	525
100	.82	18.35	75.89	5.76	1.19	14,609	8,116	14,730	8,183	15,630	8,683	1	526
135	1.83	18.13	75.47	6.40	1.20	14,388	7,993	14,656	8,142	15,658	8,699	1	527
75	2.81	18.05	71.40	10.56	.97	13,632	7,573	14,026	7,792	15,680	8,711	1	528
100	1.23	17.25	74.06	8.69	.71	14,070	7,817	14,245	7,914	15,601	8,667	1	529
50	.....	.....	.....	7.32	.....	.....	.....	.....	.....	.....	.....	1	530
50	.....	.....	.....	9.54	.....	.....	.....	.....	.....	.....	.....	1	531
50	.....	.....	.....	6.24	.....	.....	.....	.....	.....	.....	.....	1	532
550	2.27	20.28	75.32	4.40	1.04	14,688	8,160	15,029	8,349	15,721	8,734	1	533
15	1.88	21.04	73.26	5.70	.83	14,445	8,025	14,722	8,179	15,612	8,673	1	534
50	2.14	21.32	73.58	5.10	.85	14,590	8,106	14,909	8,283	15,710	8,728	1	535
300	2.47	17.93	76.26	5.81	.64	14,381	7,989	14,745	8,192	15,654	8,697	1	536
125	1.71	15.23	72.89	11.88	.74	13,517	7,509	13,752	7,640	15,606	8,670	1	537
100	1.70	16.21	73.58	10.21	.65	13,742	7,634	13,980	7,767	15,570	8,650	1	538
400	2.40	16.05	76.60	7.35	.53	14,201	7,889	14,550	8,083	15,704	8,724	1	539
425	1.84	17.38	74.73	7.89	.58	14,039	7,799	14,302	7,946	15,527	8,626	1	540
600	1.18	16.99	75.40	7.61	.57	14,256	7,920	14,426	8,014	15,614	8,674	1	541
50	.....	.....	.....	5.96	.....	.....	.....	.....	.....	.....	.....	1	542
50	.....	.....	.....	7.15	.....	.....	.....	.....	.....	.....	.....	1	543
100	1.50	21.89	69.83	8.28	.99	14,109	7,838	14,324	7,958	15,617	8,676	1	544
275	2.09	18.19	77.11	4.70	.58	14,603	8,113	14,913	8,286	15,651	8,695	1	545
500	2.07	18.29	73.59	8.12	1.11	14,056	7,809	14,353	7,974	15,622	8,679	1	546

TABLE 1.—*Coals analyzed for the United States*

UNITED STATES COALS—Continued.

Index No.	Where mined.			Commercial name of coal.	Size of coal.
	State, county, and town.	Mine.	Bed.		
1	2	3	4	5	6
	WEST VIRGINIA—Contd.				
	RALEIGH COUNTY—continued.				
547	Eccles	Eccles, No. 3....	Beckley.....	New River smokeless.	Run of mine.....
548	do.....	Eccles, No. 5....	do.....	do.....	do.....
549	do.....	do.....	do.....	do.....	do.....
550	do.....	do.....	do.....	do.....	do.....
551	do.....	do.....	do.....	do.....	do.....
552	do.....	Eccles, No. 6....	Sewell.....	do.....	do.....
553	Fireco.....	Douglas, No. 2...	Fire Creek.....	do.....	do.....
554	do.....	do.....	do.....	do.....	do.....
555	do.....	do.....	do.....	do.....	do.....
556	do.....	do.....	do.....	do.....	do.....
557	do.....	do.....	do.....	do.....	do.....
558	do.....	Leckie.....	do.....	do.....	do.....
559	do.....	do.....	do.....	do.....	do.....
560	do.....	do.....	do.....	do.....	do.....
561	do.....	do.....	do.....	do.....	do.....
562	do.....	do.....	do.....	do.....	do.....
563	do.....	Lillybrook, No. 2.	do.....	do.....	do.....
564	do.....	do.....	do.....	do.....	do.....
565	do.....	do.....	do.....	do.....	do.....
566	do.....	do.....	do.....	do.....	do.....
567	do.....	do.....	do.....	do.....	do.....
568	do.....	do.....	do.....	do.....	do.....
569	do.....	do.....	do.....	do.....	do.....
570	Francis.....	Francis.....	Pocahontas, No. 3.	Pocahontas smokeless.	do.....
571	do.....	do.....	do.....	do.....	do.....
572	do.....	do.....	do.....	do.....	do.....
573	do.....	do.....	do.....	do.....	do.....
574	Glen White.....	Glen White.....	Beckley.....	New River smokeless.	do.....
575	do.....	do.....	do.....	do.....	do.....
576	do.....	do.....	do.....	do.....	do.....
577	Glen White (near).	Glen White, Stotesbury, Big Stick, and Affinity.	do.....	do.....	do.....
578	do.....	do.....	do.....	do.....	do.....
579	Helen.....	Helen, Nos. 3 and 4.	do.....	do.....	do.....
580	do.....	do.....	do.....	do.....	do.....
581	do.....	Helen, No. 5....	do.....	do.....	do.....
582	do.....	do.....	do.....	do.....	do.....
583	do.....	do.....	do.....	do.....	do.....
584	Hotcoal.....	Hot Coal.....	do.....	do.....	do.....
585	do.....	do.....	do.....	do.....	do.....
586	do.....	do.....	do.....	do.....	do.....
587	Jonben.....	Battleship.....	Fire Creek.....	do.....	do.....
588	do.....	do.....	do.....	do.....	do.....
589	do.....	do.....	do.....	do.....	do.....
590	do.....	do.....	do.....	do.....	do.....
591	do.....	do.....	do.....	do.....	do.....
592	do.....	do.....	do.....	do.....	do.....
593	do.....	do.....	do.....	do.....	do.....

¹ Sample exposed to rain during collection and preparation.

TABLE 1.—*Coals analyzed for the United States*

UNITED STATES COALS—Continued.

Index No.	Where mined.			Commercial name of coal.	Size of coal.
	State, county, and town.	Mine.	Bed.		
1	2	3	4	5	6
	WEST VIRGINIA—Contd.				
	RALEIGH COUNTY—continued.				
594	Jonben.....	Wilton smokeless (formerly Bacontown).	Fire Creek.....	New River smokeless.	Run of mine.....
595	do.....	do.....	do.....	do.....	do.....
596	do.....	do.....	do.....	do.....	do.....
597	do.....	do.....	do.....	do.....	do.....
598	do.....	do.....	do.....	do.....	do.....
599	do.....	do.....	do.....	do.....	do.....
600	do.....	do.....	do.....	do.....	do.....
601	do.....	do.....	do.....	do.....	do.....
602	Killarney.....	Killarney.....	Beckley.....	do.....	do.....
603	do.....	do.....	do.....	do.....	do.....
604	Lanark.....	Lanark.....	Sewell, Beckley, and Fire Creek.	do.....	Slack.....
			Fire Creek, 96 per cent; Beckley, 4 per cent.		Run of mine.....
605	Lego.....	Fire Creek.....	Fire Creek, 87 per cent; Beckley, 13 per cent.	do.....	do.....
606	do.....	do.....	Fire Creek.....	do.....	do.....
607	do.....	do.....	Beckley and Fire Creek.	do.....	do.....
608	do.....	do.....	do.....	do.....	do.....
609	do.....	do.....	do.....	do.....	do.....
610	do.....	Laurel.....	Pocahontas, No. 3.	Pocahontas smokeless.	do.....
611	do.....	do.....	do.....	do.....	do.....
612	do.....	do.....	do.....	do.....	do.....
613	do.....	do.....	do.....	do.....	do.....
614	Lester.....	Lester smokeless.	Beckley.....	New River smokeless.	do.....
615	do.....	Neal.....	Sewell.....	do.....	do.....
616	do.....	do.....	do.....	do.....	do.....
617	Lillybrook.....	Lillybrook, No. 1.	Fire Creek.....	do.....	do.....
618	do.....	do.....	do.....	do.....	do.....
619	do.....	do.....	do.....	do.....	do.....
620	do.....	do.....	do.....	do.....	do.....
621	do.....	do.....	do.....	do.....	do.....
622	do.....	Lilly and Hornbrook.	Pocahontas, No. 3.	Pocahontas smokeless.	do.....
623	do.....	do.....	do.....	do.....	do.....
624	do.....	do.....	do.....	do.....	do.....
625	do.....	do.....	do.....	do.....	do.....
626	McVey.....	Beard.....	Beckley.....	New River smokeless.	do.....
627	do.....	do.....	do.....	do.....	do.....
628	do.....	do.....	do.....	do.....	do.....
629	MacAlpin.....	MacAlpin.....	do.....	do.....	do.....
630	do.....	do.....	do.....	do.....	do.....
631	do.....	do.....	do.....	do.....	do.....
632	do.....	do.....	do.....	do.....	do.....
633	Mabscott.....	Mabscott.....	Sewell.....	do.....	do.....
634	Metatton.....	Summit.....	do.....	do.....	do.....
635	do.....	do.....	do.....	do.....	do.....
636	Mistletoe.....	Lynwin.....	Beckley.....	do.....	do.....
637	do.....	do.....	do.....	do.....	do.....
638	do.....	do.....	do.....	do.....	do.....
639	do.....	do.....	do.....	do.....	do.....

¹ Sample exposed to rain during collection and preparation

TABLE 1.—*Coals analyzed for the United States*

UNITED STATES COALS—Continued.

Index No.	Where mined.			Commercial name of coal.	Size of coal.
	State, county, and town.	Mine.	Bed.		
1	2	3	4	5	6
	WEST VIRGINIA—Contd.				
	RALEIGH COUNTY—continued.				
640	Mistletoe.....	Lynwin.....	Beckley.....	New River smokeless.	Run of mine.....
641	do.....	do.....	do.....	do.....	do.....
642	do.....	do.....	do.....	do.....	do.....
643	Oswald.....	Oswald.....	Sewell.....	do.....	do.....
644	do.....	do.....	do.....	do.....	do.....
645	Pemberton.....	Pemberton.....	Beckley.....	do.....	do.....
646	do.....	do.....	do.....	do.....	do.....
647	do.....	do.....	do.....	do.....	do.....
648	do.....	do.....	do.....	do.....	do.....
649	do.....	do.....	do.....	do.....	do.....
650	do.....	do.....	do.....	do.....	do.....
651	do.....	do.....	do.....	do.....	do.....
652	do.....	do.....	do.....	do.....	do.....
653	do.....	Ragland.....	do.....	do.....	do.....
654	Pickshin.....	Pickshin.....	do.....	do.....	do.....
655	do.....	do.....	do.....	do.....	do.....
656	do.....	do.....	do.....	do.....	do.....
657	Price Hill.....	Price Hill.....	Sewell.....	do.....	do.....
658	do.....	do.....	do.....	do.....	do.....
659	Princewick.....	Prince Wick.....	Beckley.....	do.....	do.....
660	do.....	do.....	do.....	do.....	do.....
661	Prosperity.....	Cranberry, No. 1	Sewell.....	do.....	do.....
662	Raleigh.....	Raleigh, Nos. 1 and 4.	Beckley.....	do.....	do.....
663	do.....	Raleigh, No. 3.	do.....	do.....	do.....
664	do.....	Raleigh, No. 6.	do.....	do.....	do.....
665	do.....	do.....	do.....	do.....	do.....
666	do.....	do.....	do.....	do.....	do.....
667	Rhodell.....	Rhodell, Nos. 1 and 2.	Pocahontas No. 3, 38 per cent; Beckley, 62 per cent.	New River or Pocahontas smokeless.	do.....
668	do.....	do.....	Pocahontas No. 3, 20 per cent; Beckley, 80 per cent.	do.....	do.....
669	do.....	do.....	Pocahontas No. 3, 20 per cent; Beckley, 80 per cent.	do.....	do.....
670	do.....	do.....	Pocahontas No. 3, 21 per cent; Beckley, 79 per cent.	do.....	do.....
671	do.....	do.....	Beckley.....	New River smokeless.	do.....
672	Skelton.....	Cranberry No. 2.	Sewell.....	do.....	do.....
673	do.....	do.....	do.....	do.....	do.....
674	Slab Fork.....	Slab Fork, No. 1.	Beckley.....	do.....	do.....
675	do.....	Slab Fork, No. 2.	do.....	do.....	do.....
676	do.....	Slab Fork (mines)	do.....	do.....	do.....
677	Slab Fork and Mac Alpin.	Slab Fork and Mac Alpin.	do.....	do.....	do.....
678	Sprague.....	Cranberry, No. 3.	Sewell.....	do.....	do.....
679	Stanaford.....	Piney, Nos. 1, 2, and 3.	Sewell and Beckley.	do.....	do.....
680	Stotesbury.....	Stotesbury.....	Beckley.....	do.....	do.....

Government during the fiscal years 1916-1922—Continued.

UNITED STATES COALS—Continued.

Tons delivered.	Proximate analysis.					Calorific value per pound.						Number of analyses averaged.	Index No.
	As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
	Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
7	8	9	10	11	12	13	14	15	16	17	18	19	20
50	-----	-----	-----	6.53	-----	-----	-----	-----	-----	-----	-----	1	640
50	-----	-----	-----	6.36	-----	-----	-----	-----	-----	-----	-----	1	641
50	-----	-----	-----	5.71	-----	-----	-----	-----	-----	-----	-----	1	642
400	2.80	22.50	72.20	5.30	0.58	14,303	7,946	14,715	8,175	15,539	8,633	1	643
200	2.05	23.40	72.01	4.59	.83	14,565	8,092	14,870	8,261	15,585	8,658	1	644
450	1.78	17.82	69.84	12.34	.79	13,440	7,467	13,684	7,602	15,610	8,672	1	645
215	2.40	17.82	74.84	7.34	.75	14,166	7,870	14,514	8,063	15,664	8,702	1	646
50	-----	-----	-----	9.95	-----	-----	-----	-----	-----	-----	-----	1	647
50	-----	-----	-----	7.49	-----	-----	-----	-----	-----	-----	-----	1	648
50	-----	-----	-----	8.54	-----	-----	-----	-----	-----	-----	-----	1	649
50	-----	-----	-----	6.57	-----	-----	-----	-----	-----	-----	-----	1	650
50	-----	-----	-----	8.74	-----	-----	-----	-----	-----	-----	-----	1	651
50	-----	-----	-----	6.28	-----	-----	-----	-----	-----	-----	-----	1	652
250	2.37	18.26	74.28	7.46	.68	14,117	7,843	14,460	8,033	15,626	8,681	1	653
200	2.07	17.86	76.85	5.29	.53	14,571	8,095	14,879	8,266	15,710	8,728	1	654
50	-----	-----	-----	5.63	-----	-----	-----	-----	-----	-----	-----	1	655
50	-----	-----	-----	5.88	-----	-----	-----	-----	-----	-----	-----	1	656
350	2.44	22.39	72.24	5.37	1.37	14,399	7,999	14,759	8,199	15,957	8,665	1	657
50	-----	-----	-----	4.68	-----	-----	-----	-----	-----	-----	-----	1	658
400	1.61	17.68	77.84	4.48	.54	14,746	8,192	14,987	8,326	15,690	8,717	1	659
50	-----	-----	-----	5.27	-----	-----	-----	-----	-----	-----	-----	1	660
800	2.47	20.88	74.29	4.83	0.59	14,586	8,103	14,955	8,308	15,714	8,730	1	661
150	1.49	19.70	75.85	4.45	.69	14,761	8,201	14,984	8,324	15,682	8,712	1	662
400	1.87	20.87	74.81	4.32	.71	14,692	8,162	14,972	8,318	15,648	8,693	1	663
700	2.10	19.26	75.38	5.36	.86	14,510	8,061	14,821	8,234	15,660	8,700	1	664
50	-----	-----	-----	6.85	-----	-----	-----	-----	-----	-----	-----	1	665
50	-----	-----	-----	4.74	-----	-----	-----	-----	-----	-----	-----	1	666
250	2.43	16.87	72.77	10.36	.75	13,632	7,573	13,972	7,762	15,587	8,659	1	667
200	2.68	17.33	73.24	9.43	.67	13,769	7,649	14,148	7,860	15,621	8,678	1	668
150	1.30	17.96	73.27	8.77	.75	14,097	7,832	14,283	7,935	15,656	8,698	1	669
200	1.53	18.10	73.21	8.69	.76	14,008	7,782	14,226	7,903	15,580	8,656	1	670
215	2.31	17.98	74.16	7.86	.77	14,084	7,824	14,417	8,009	15,647	8,693	1	671
200	2.18	20.07	72.57	7.36	.83	14,180	7,878	14,496	8,053	15,648	8,693	1	672
450	1.44	21.51	73.01	5.48	.81	14,559	8,088	14,772	8,207	15,628	8,682	1	673
800	2.72	17.66	76.81	5.53	.71	14,318	7,954	14,718	8,177	15,580	8,656	1	674
175	2.19	17.33	76.80	5.87	.69	14,404	8,002	14,727	8,182	15,645	8,692	1	675
400	3.15	17.45	76.30	6.25	.48	14,140	7,856	14,600	8,111	15,573	8,652	1	676
1,097	2.96	18.89	75.06	6.05	.65	14,276	7,931	14,711	8,173	15,658	8,699	17	677
600	1.92	21.08	74.44	4.48	.83	14,746	8,192	15,035	8,353	15,740	8,744	1	678
3,209	2.52	22.41	72.21	5.38	.77	14,427	8,015	14,800	8,222	15,642	8,690	17	679
1,050	2.11	18.69	75.32	5.99	.66	14,304	7,947	14,612	8,118	15,543	8,635	1	680

TABLE 1.—*Coals analyzed for the United States*

UNITED STATES COALS—Continued.

Index No.	Where mined.			Commercial name of coal.	Size of coal.
	State, county, and town.	Mine.	Bed.		
1	2	3	4	5	6
	WEST VIRGINIA—Contd.				
	RALEIGH COUNTY—continued.				
681	Stotesbury	Stotesbury	Beckley	New River smokeless.	Run of mine.....
682	do.....	do.....	do.....	do.....	Slack.....
683	Sullivan.....	Sullivan.....	do.....	do.....	Run of mine.....
684	do.....	do.....	do.....	do.....	do.....
685	do.....	do.....	do.....	do.....	do.....
686	Talbert.....	Crab Orchard.....	Sewell.....	do.....	do.....
687	do.....	do.....	do.....	do.....	do.....
688	do.....	do.....	do.....	do.....	do.....
689	do.....	do.....	do.....	do.....	do.....
690	do.....	do.....	do.....	do.....	do.....
691	Tamroy.....	Tamroy.....	do.....	do.....	do.....
692	do.....	do.....	do.....	do.....	do.....
693	do.....	do.....	do.....	do.....	do.....
694	Tams.....	Tams.....	Beckley.....	do.....	do.....
695	do.....	do.....	do.....	do.....	do.....
696	do.....	do.....	do.....	do.....	do.....
697	do.....	do.....	do.....	do.....	do.....
698	do.....	do.....	do.....	do.....	do.....
699	do.....	do.....	do.....	do.....	do.....
700	do.....	do.....	do.....	do.....	Slack.....
701	Tommy Creek.....	Tommy Creek.....	Pocahontas, No. 3.....	Pocahontas smokeless.	Run of mine.....
702	do.....	do.....	do.....	do.....	do.....
703	do.....	do.....	do.....	do.....	do.....
704	do.....	do.....	do.....	do.....	do.....
705	Vanwood.....	Wood-Sullivan.....	Pocahontas No. 3, 22 per cent; Beckley, 78 per cent.	New River or Pocahontas smokeless.	do.....
706	do.....	do.....	Beckley.....	New River smokeless.	do.....
707	do.....	do.....	do.....	do.....	do.....
708	do.....	do.....	do.....	do.....	do.....
709	Viacova.....	Viacova.....	Sewell.....	do.....	do.....
710	Whitby.....	Bowyer.....	Fire Creek and Beckley.....	do.....	do.....
711	do.....	do.....	Fire Creek, 80 per cent; Beckley, 20 per cent.	do.....	do.....
712	do.....	do.....	Fire Creek and Beckley.....	do.....	do.....
713	do.....	do.....	Beckley.....	do.....	do.....
714	do.....	do.....	do.....	do.....	do.....
715	do.....	do.....	do.....	do.....	do.....
716	Wiley.....	Piney Creek, No. 1.....	do.....	do.....	do.....
717	Winding Gulf.....	Winding Gulf.....	do.....	do.....	Nut and slack (crushed).
718	do.....	Winding Gulf, No. 1.....	do.....	do.....	Run of mine.....
719	do.....	Winding Gulf, No. 3.....	do.....	do.....	do.....
720	do.....	Winding Gulf (mines).	do.....	do.....	do.....
721	do.....	do.....	do.....	do.....	do.....
722	do.....	do.....	do.....	do.....	do.....
723	do.....	do.....	do.....	do.....	do.....
724	Woodbay.....	Woodbay.....	do.....	do.....	do.....
725	do.....	Various (mines).	do.....	do.....	do.....

Government during the fiscal years 1916-1922—Continued.

UNITED STATES COALS—Continued.

Tons delivered.	Proximate analysis.					Calorific value per pound.						Number of analyses averaged.	Index No.
	As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
	Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
7	8	9	10	11	12	13	14	15	16	17	18	19	20
50				6.28								1	681
200				6.92								1	682
250	1.97	17.57	72.86	9.57	1.74	13,821	7,678	14,099	7,833	15,591	8,662	1	683
200	1.70	18.86	74.72	6.42	1.62	14,368	7,982	14,616	8,120	15,619	8,677	1	684
50				6.63								1	685
150	2.69	20.89	71.64	7.47	.99	14,111	7,839	14,501	8,056	15,672	8,707	1	686
185	2.95	21.34	71.06	7.60	.82	14,028	7,793	14,454	8,030	15,643	8,691	1	687
50				8.68								1	688
50				7.21								1	689
50				8.26								1	690
400	3.05	21.25	73.25	5.50	.60	14,324	7,958	14,775	8,208	15,635	8,686	1	691
1,700	2.94	21.63	72.41	5.96	.72	14,311	7,951	14,744	8,191	15,678	8,710	34	692
200	2.20	22.22	72.85	4.93	.85	14,536	8,076	14,863	8,257	15,634	8,686	1	693
2,146	2.31	17.60	76.27	6.13	.69	14,346	7,970	14,685	8,158	15,644	8,691	31	694
400	2.85	17.20	76.05	6.75	.68	14,184	7,880	14,600	8,111	15,657	8,698	1	695
2,950	2.87	17.46	76.02	6.52	.63	14,231	7,906	14,651	8,139	15,673	8,707	59	696
1,250	1.79	17.15	75.07	7.78	.64	14,144	7,858	14,402	8,001	15,617	8,676	1	697
1,600	1.51	17.66	77.35	4.99	.57	14,623	8,124	14,847	8,248	15,627	8,682	1	698
50				5.43								1	699
50				6.32								1	700
50	1.21	16.99	75.58	7.43	0.72	14,319	7,955	14,494	8,052	15,657	8,698	1	701
75	2.01	18.26	73.64	8.10	.64	14,046	7,803	14,334	7,963	15,597	8,665	1	702
50				8.90								1	703
50				12.18								1	704
700	2.05	17.66	75.10	7.24	.62	14,221	7,901	14,519	8,066	15,602	8,668	1	705
350	1.84	18.09	75.04	6.87	.64	14,275	7,931	14,543	8,079	15,616	8,676	1	706
50				6.08								1	707
50				8.30								1	708
100	1.33	17.44	66.47	16.09	.63	12,756	7,087	12,928	7,182	15,407	8,559	1	709
250	2.30	16.21	75.88	7.91	.87	14,111	7,839	14,443	8,024	15,684	8,713	1	710
150	1.80	16.54	76.55	6.91	.89	14,374	7,986	14,637	8,132	15,724	8,736	1	711
50				6.61								1	712
50				7.42								1	713
50				8.06								1	714
50				9.08								1	715
100	1.42	17.51	71.73	10.76	1.42	13,619	7,566	13,815	7,675	15,481	8,601	1	716
2,948	1.85	18.60	75.58	5.82	.73	14,514	8,063	14,788	8,216	15,702	8,723	11	717
550	1.82	18.07	76.01	5.92	.50	14,485	8,047	14,754	8,197	15,682	8,712	1	718
400	1.87	17.86	75.21	6.93	.77	14,313	7,952	14,586	8,103	15,672	8,707	1	719
50				9.85								1	720
50				6.11								1	721
50				5.08								1	722
50				4.82								1	723
600	1.98	17.32	75.77	6.91	.60	14,232	7,907	14,519	8,066	15,597	8,665	1	724
219,642	2.59	17.58	76.31	6.11	.65	14,313	7,952	14,694	8,163	15,650	8,685	138	725

TABLE 1.—*Coals analyzed for the United States*

UNITED STATES COALS—Continued.

Index No.	Where mined.			Commercial name of coal.	Size of coal.
	State, county, and town.	Mine.	Bed.		
1	2	3	4	5	6
	WEST VIRGINIA—Contd.				
	SUMMERS COUNTY.				
726	Claypool.....	Hump Mountain.	Fire Creek.....	New River Smokeless.	Run of mine.....
	TUCKER COUNTY.				
727	Albert.....	Douglas.....	Lower Kittanning.	Douglas.....	do.....
728	do.....	do.....	do.....	do.....	do.....
729	Thomas (near).....	Davis (mines).....	do.....	Davis.....	do.....
730	do.....	do.....	do.....	do.....	do.....
731	do.....	do.....	do.....	do.....	do.....
	WYOMING COUNTY.				
732	Alpoa.....	Alpha Pocahontas.	Beckley.....	New River smokeless.	do.....
733	do.....	do.....	do.....	do.....	do.....
734	Bud.....	Thermo-Pocahontas.	do.....	do.....	do.....
735	do.....	do.....	do.....	do.....	do.....
736	do.....	do.....	do.....	do.....	do.....
737	do.....	do.....	do.....	do.....	do.....
738	Caloric.....	Smith-Pocahontas.	Pocahontas No. 3.	Pocahontas smokeless.	do.....
739	do.....	do.....	do.....	do.....	do.....
740	Corinne.....	Corinne.....	do.....	do.....	do.....
741	do.....	do.....	do.....	do.....	do.....
742	do.....	do.....	do.....	do.....	do.....
743	do.....	do.....	do.....	do.....	do.....
744	do.....	Newlest.....	do.....	do.....	do.....
745	do.....	do.....	do.....	do.....	do.....
746	do.....	do.....	do.....	do.....	do.....
747	Devils Fork.....	Devils Fork.....	do.....	do.....	do.....
748	do.....	do.....	do.....	do.....	do.....
749	do.....	do.....	do.....	do.....	do.....
750	do.....	do.....	do.....	do.....	do.....
751	do.....	do.....	do.....	do.....	do.....
752	Herndon.....	Flat Top.....	Pocahontas No. 3, 70 per cent; Pocahontas No. 6, 30 per cent.	do.....	do.....
753	do.....	do.....	Pocahontas No. 3, 93 per cent; Pocahontas No. 6, 7 per cent.	do.....	do.....
754	do.....	do.....	Pocahontas No. 3, 81 per cent; Pocahontas No. 6, 19 per cent.	do.....	do.....
755	do.....	do.....	Pocahontas No. 3, 90 per cent; Pocahontas No. 6, 10 per cent.	do.....	do.....
756	do.....	do.....	Pocahontas No. 3, 87 per cent; Pocahontas No. 6, 13 per cent.	do.....	do.....

Government during the fiscal years 1916-1922—Continued.

UNITED STATES COALS—Continued.

Tons delivered.	Proximate analysis.					Calorific value per pound.						Number of analyses averaged.	Index No.
	As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
		Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.			Calories.
7	8	9	10	11	12	13	14	15	16	17	18	19	20
1,350	3.22	18.10	74.77	7.13	0.63	14,109	7,838	14,578	8,099	15,697	8,721	27	726
1,203	2.83	24.01	69.48	6.51	1.11	14,164	7,869	14,577	8,098	15,592	8,662	15	727
1,525	2.26	24.12	68.89	6.99	1.18	14,113	7,841	14,439	8,022	15,524	8,624	19	728
2,048	2.82	24.16	68.38	7.46	.89	14,020	7,789	14,427	8,015	15,590	8,661	15	729
463	2.83	23.86	67.53	8.61	1.02	13,833	7,685	14,236	7,909	15,577	8,654	7	730
2,150	3.63	24.48	66.66	8.86	1.01	13,659	7,588	14,173	7,874	15,551	8,639	43	731
400	3.25	18.60	75.70	5.70	1.05	14,329	7,961	14,810	8,228	15,705	8,725	1	732
300	1.62	19.38	74.56	6.06	1.11	14,497	8,054	14,736	8,187	15,687	8,715	1	733
400	1.05	19.07	72.70	8.23	1.57	14,122	7,846	14,272	7,929	15,552	8,640	1	734
50	-----	-----	-----	6.91	-----	-----	-----	-----	-----	-----	-----	1	735
50	-----	-----	-----	7.82	-----	-----	-----	-----	-----	-----	-----	1	736
50	-----	-----	-----	7.22	-----	-----	-----	-----	-----	-----	-----	1	737
200	2.06	16.02	70.78	13.20	0.78	13,319	7,399	13,599	7,555	15,667	8,704	1	738
400	2.73	16.82	69.75	13.43	.75	13,050	7,250	13,416	7,453	15,497	8,609	1	739
150	1.22	15.69	71.03	13.28	.60	13,318	7,399	13,482	7,490	15,548	8,638	1	740
350	1.91	16.42	73.10	10.48	.63	13,638	7,577	13,904	7,724	15,532	8,629	1	741
450	2.19	16.74	74.29	8.97	.65	13,944	7,747	14,256	7,920	15,661	8,701	1	742
300	.82	17.09	75.07	7.84	.60	14,262	7,923	14,380	7,989	15,603	8,668	1	743
350	2.50	14.96	73.19	11.85	.65	13,476	7,487	13,822	7,679	15,680	8,711	1	744
350	1.05	16.90	73.86	9.24	.72	14,054	7,808	14,203	7,891	15,649	8,694	1	745
400	.87	17.12	74.55	8.33	.63	14,148	7,860	14,272	7,929	15,569	8,649	1	746
200	1.85	17.36	76.31	6.33	.70	14,397	7,998	14,668	8,149	15,659	8,699	1	747
50	-----	-----	-----	6.70	-----	-----	-----	-----	-----	-----	-----	1	748
50	-----	-----	-----	5.99	-----	-----	-----	-----	-----	-----	-----	1	749
50	-----	-----	-----	6.50	-----	-----	-----	-----	-----	-----	-----	1	750
50	-----	-----	-----	6.58	-----	-----	-----	-----	-----	-----	-----	1	751
250	1.58	16.28	71.80	11.92	.60	13,502	7,501	13,719	7,622	15,576	8,653	1	752
300	2.07	16.89	74.28	8.83	.55	13,953	7,752	14,248	7,916	15,628	8,682	1	753
200	1.58	17.02	72.32	10.66	.77	13,774	7,652	13,995	7,775	15,665	8,703	1	754
300	1.20	16.84	73.08	10.08	.54	13,886	7,714	14,055	7,808	15,631	8,684	1	755
250	.93	17.14	75.29	7.57	.53	14,293	7,941	14,427	8,015	15,609	8,672	1	756

TABLE 1.—*Coals analyzed for the United States*

UNITED STATES COALS—Continued.

Index No.	Where mined.			Commercial name of coal.	Size of coal.
	State, county, and town.	Mine.	Bed.		
1	2	3	4	5	6
	WEST VIRGINIA—Contd.				
	WYOMING COUNTY—continued.				
757	Herndon.....	Flat Top.....	Pocahontas Nos. 3 and 6.	Pocahontas smokeless.....	Run of mine.....
758	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
759	.....do.....	Monticello.....	Beckley.....	New River smokeless.	.....do.....
760	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
761	Iroquois.....	Iroquois.....	Pocahontas No. 3.	Pocahontas smokeless.	.....do.....
762	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
763	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
764	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
765	Mead Pocahontas tipple.	Mead Pocahontas.	.....do.....	.....do.....	.....do.....
766	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
767	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
768	Morco.....	Covell.....	.....do.....	.....do.....	.....do.....
769	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
770	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
771	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
772	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
773	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
774	Mullens.....	Mullens.....	.....do.....	.....do.....	.....do.....
775	Otsego.....	Sabine.....	Pocahontas No. 3, 61 per cent; Beckley, 39 per cent.	Pocahontas or New River smokeless.	.....do.....
776	Tracoal.....	Trace Fork.....	Pocahontas No. 3.	Pocahontas smokeless.	.....do.....
777	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
778	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
779	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
780	Tralee.....	Barkers Creek, Nos. 1 and 3.	Pocahontas No. 3, 73 per cent; Beckley, 27 per cent.	Pocahontas or New River smokeless.	.....do.....
781	.....do.....	.....do.....	Pocahontas, No. 3 and Beckley.	.....do.....	.....do.....
782	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
783	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
784	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
785	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
786	.....do.....	Barkers Creek, No. 2.	Pocahontas No. 6.	Pocahontas smokeless.	.....do.....
787	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
788	.....do.....	Harty or Tralee, No. 2.	Pocahontas No. 3.	.....do.....	.....do.....
789	.....do.....	.....do.....	.....do.....	.....do.....	Run of mine (washed)
790	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
791	.....do.....	.....do.....	.....do.....	.....do.....	Slack (washed).....
792	.....do.....	.....do.....	.....do.....	.....do.....	Run of mine (washed)
793	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
794	Wycoc.....	Wycoc.....	.....do.....	.....do.....	Run of mine.....
795	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
796	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
797	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
798	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....
799	.....do.....	.....do.....	.....do.....	.....do.....	Slack.....

¹ Sample exposed to rain during collection and preparation.

TABLE 1.—*Coals analyzed for the United States*
UNITED STATES COALS—Continued.

Index No.	Where mined.			Commercial name of coal.	Size of coal.
	State, county, and town.	Mine.	Bed.		
1	2	3	4	5	6
	WEST VIRGINIA—Contd.				
	FAYETTE AND RAL- EIGH COUNTIES.				
800	Various mines...	Sewell.....	New River smokeless.	Run of mine.....	
801	do.....	do.....	do.....	do.....	
802	do.....	Sewell and Beckley.	do.....	do.....	
	MCDOWELL AND MERCER COUNTIES.				
803	Various mines...	Pocahontas Nos. 3 and 4 and Sewell.	Pocahontas or New River smokeless.	do.....	
804	do.....	Pocahontas No. 3 and Sewell.	do.....	do.....	
	MCDOWELL, MERCER COUNTIES, W. VA. AND TAZEWELL COUNTY, VA.				
805	Various mines...	Pocahontas No. 3.	Pocahontas smokeless.	do.....	
	WYOMING.				
	FREMONT COUNTY.				
806	Hudson.....	Poposia.....	Poposia.....	Pea and nut, $\frac{1}{2}$ by 2 $\frac{1}{2}$ inch screens.	
807	do.....	do.....	do.....	Nut and slack through 2 $\frac{1}{2}$ -inch screen.	
	HOT SPRINGS COUNTY.				
808	Gebo.....	Owl Creek.....	Gebo.....	Owl Creek.....	
	LINCOLN COUNTY.				
809	Kemmerer.....	No. 1.....	Adaville.....	Keystone.....	
	SHERIDAN COUNTY.				
810	Acme.....	Acme, No. 3.....	Monarch.....	Acme.....	
811	Carneyville.....	Carney.....	Carney.....	Carney.....	
812	do.....	do.....	do.....	do.....	
813	do.....	do.....	do.....	Lump, over 4-inch bar screen.	
814	do.....	do.....	do.....	do.....	
815	do.....	do.....	do.....	Lump.	
816	Kooi.....	Kooi.....	Monarch.....	Kooi.....	
817	do.....	do.....	do.....	do.....	
818	Monarch.....	Monarch.....	Monarch.....	Run of mine.....	
819	do.....	do.....	do.....	Lump.	
820	Acme, Carneyville, Dietz, Kooi, and Monarch.	Acme, Carney, Dietz, Kooi, and Monarch.	Carney and Monarch.	Acme, Carney, Dietz, Kooi, and Monarch.	
821	do.....	do.....	do.....	do.....	
822	do.....	do.....	do.....	do.....	
	SWEETWATER COUNTY.				
823	Superior.....	Superior, No. 1..	No. 1.....	Superior.....	
824	do.....	do.....	do.....	do.....	
825	do.....	do.....	do.....	do.....	

Government during the fiscal years 1916-1922—Continued.

UNITED STATES COALS—Continued.

Tons delivered.	Proximate analysis.					Calorific value per pound.						Number of analyses averaged.	Index No.
	As received.	Dry coal.				As received.		Dry coal.		Moisture free and ash free.			
	Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.		
7	8	9	10	11	12	13	14	15	16	17	18	19	20
35,298	2.94	23.20	71.82	4.98	0.79	14,429	8,016	14,866	8,259	15,645	8,692	65	800
1,800	2.98	24.58	69.88	5.54	.71	14,248	7,916	14,686	8,159	15,547	8,637	9	801
49,978	2.98	21.21	73.88	4.91	.71	14,441	8,023	14,885	8,269	15,654	8,697	33	802
363,534	2.15	18.36	75.55	6.09	.70	14,439	8,022	14,756	8,198	15,713	8,729	240	803
56,544	3.15	18.32	74.81	6.87	.57	14,159	7,866	14,619	8,122	15,697	8,721	42	804
195,712	2.98	19.28	74.27	6.45	.54	14,272	7,929	14,710	8,172	15,724	8,736	140	805
6,214	22.01	42.96	48.84	8.20	.71	9,413	5,269	12,070	6,706	13,148	7,304	26	806
7,384	20.05	40.06	48.12	11.82	.80	9,152	5,084	11,447	6,359	12,981	7,212	36	807
1,913	13.03	43.22	51.80	4.98	.59	11,353	6,307	13,054	7,252	13,738	7,632	8	808
170	18.45	45.22	50.68	4.10	.74	10,508	5,838	12,885	7,158	13,436	7,464	4	809
7,939	22.60	42.93	49.34	7.73	.92	9,315	5,175	12,035	6,686	13,043	7,246	33	810
2,420	20.79	47.22	47.72	5.06	.58	9,782	5,434	12,349	6,861	13,007	7,226	9	811
525	22.40	42.68	52.62	4.70	.53	9,605	5,336	12,378	6,877	12,988	7,216	5	812
1,127	19.84	45.66	50.10	4.24	.55	9,978	5,543	12,447	6,915	12,998	7,221	17	813
400	22.45	44.98	49.79	5.23	.44	9,529	5,294	12,288	6,827	12,966	7,203	6	814
1,575	22.32	44.57	50.33	5.10	.53	9,650	5,361	12,423	6,902	13,091	7,273	6	815
1,194	18.56	44.07	50.54	5.39	.66	9,998	5,554	12,277	6,821	12,976	7,209	18	816
6,813	24.18	45.02	43.65	11.33	.86	8,730	4,850	11,514	6,397	12,985	7,214	34	817
1,118	21.16	43.62	50.78	5.60	.71	9,683	5,379	12,282	6,823	13,011	7,228	5	818
2,330	20.36	44.86	50.12	5.02	.71	9,765	5,425	12,261	6,812	12,909	7,172	8	819
662	18.40	43.21	52.21	4.58	.53	10,041	5,578	12,305	6,836	12,896	7,164	19	820
1,206	18.52	42.66	51.68	5.66	.59	9,977	5,543	12,245	6,803	12,980	7,211	29	821
145	21.66	42.04	51.04	6.92	.54	9,308	5,171	11,882	6,601	12,765	7,092	3	822
378	10.57	43.67	51.22	5.11	1.02	11,767	6,537	13,158	7,310	13,867	7,704	2	823
2,092	11.88	42.74	49.69	7.57	1.24	11,340	6,300	12,869	7,149	13,923	7,735	26	824
3,413	11.57	42.12	50.28	7.60	1.32	11,307	6,282	12,786	7,103	13,838	7,688	39	825

ESSENTIAL DATA ON COALS LISTED.

The pages following present data on the rank of coal, place and date of delivery, purchaser, price, and contract guaranties for coals purchased under Government contracts; also data on the rank of the coals, organization for whom sampled, and date and place of sampling for coals sampled in connection with other technologic investigations. The numbers refer to the index numbers in columns 1 and 20 of Table 1. Prices are per ton of 2,000 pounds, delivered, except where otherwise stated. The year given as date of delivery is the fiscal year; for example, 1915-16 refers to the fiscal year begun July 1, 1915, and ended June 30, 1916.

CANADIAN COALS.

1. Bituminous coal delivered to Fort Geo. Wright, Wash., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 1 per cent moisture, "as received"; 12 per cent ash and 13,600 B. t. u., "dry coal." Price, \$3 per ton f. o. b. mines for 1-inch coal, \$3.25 for 2-inch, and \$3.50 for 5-inch.
2. Bituminous coal delivered to Fort Winfield Scott, Calif., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 2.5 per cent moisture, "as received"; 10 per cent ash and 12,800 B. t. u., "dry coal." Price, \$8.20 per ton.
3. Bituminous coal delivered to Fort McDowell, Calif., Quartermaster Corps, War Department, 1915-16. Contract guaranties same as No. 2. Price, \$8.70 per ton.
4. Bituminous coal delivered to Fort Mason, Calif., Quartermaster Corps, War Department, 1915-16. Contract guaranties same as No. 2. Price, \$7.45 per ton.
5. Bituminous coal delivered to Presidio of San Francisco, Calif., Quartermaster Corps, War Department, 1915-16. Contract guaranties same as No. 2. Price, \$7.45 per ton.
6. Bituminous coal delivered to Alcatraz Island, Calif., Quartermaster Corps, War Department, 1915-16. Contract guaranties same as No. 2. Price, \$8.70 per ton.
7. Bituminous coal delivered to Fort Baker, Calif., Quartermaster Corps, War Department, 1915-16. Contract guaranties same as No. 2. Price, \$9.35 per ton.
8. Bituminous coal delivered to Fort Mason, Calif., Quartermaster Corps, War Department, 1916-17. Contract guaranties: 3 per cent moisture, "as received"; 12 per cent ash and 12,500 B. t. u., "dry coal." Price, \$7.60 per ton in bulk and \$9.60 in bags on board vessels at San Francisco, Calif., \$7.60 per ton on board vessels at Oakland, Calif., \$8.60 per ton on dock at Fort Mason.
9. Bituminous coal delivered to Fort McDowell, Calif., Quartermaster Corps, War Department, 1916-17. Contract guaranties same as No. 8. Price, \$8.70 per ton.
10. Bituminous coal delivered to Fort McDowell, Calif., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 2.5 per cent moisture, "as received"; 10 per cent ash and 12,800 B. t. u., "dry coal." Price, \$8.45 per ton.
11. Bituminous coal delivered to Fort Wm. H. Seward, Alaska, Quartermaster Corps, War Department, 1915-16. Contract guaranties: 2.6 per cent moisture, "as received"; 8 per cent ash and 13,200 B. t. u., "dry coal." Price, \$9 per ton.
12. Bituminous coal delivered to Fort Worden, Wash., Quartermaster Corps, War Department, 1915-16. Contract guaranties same as No. 11. Price, \$6.53 per ton.
13. Bituminous coal delivered to Fort Ward, Wash., Quartermaster Corps, War Department, 1915-16. Contract guaranties same as No. 11. Price, \$6.55 per ton.
14. Bituminous coal delivered to Fort Lawton, Wash., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 2.6 per cent moisture, "as received"; 9 per cent ash and 13,000 B. t. u., "dry coal." Price, \$6.26 per ton.

ALABAMA COALS.

15. Bituminous coal delivered to Fort Barrancas, Fla., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 2.5 per cent moisture, "as received"; 6 per cent ash and 14,500 B. t. u., "dry coal." Price, \$3.20 per ton.

16. Bituminous coal delivered to Fort Morgan, Ala., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 3 per cent moisture, "as received"; 6 per cent ash and 14,000 B. t. u., "dry coal." Price, \$4.40 per ton.

17. Bituminous coal delivered to the United States engineer office, New Orleans, La., War Department, 1916-17. Contract guaranties: 3 per cent moisture, "as received"; 8 per cent ash and 13,800 B. t. u., "dry coal." Price, \$3.05 per ton, delivered on barges at Port Eads or Burwood, La., or any point on Mississippi River at or below Plaquemine.

18. Bituminous coal delivered to the United States penitentiary, Atlanta, Ga., Department of Justice, 1919-20. Contract guaranties: 1.5 per cent moisture, "as received"; 10.5 per cent ash and 13,750 B. t. u., "dry coal." Price \$4.55 per ton.

19. Bituminous coal delivered to the custom house, New Orleans, La., Treasury Department, 1916-17. Contract guaranties: 8 per cent ash "dry coal"; 14,300 B. t. u., "as received." Price, \$3.44 per ton (2,240 pounds).

20. Bituminous coal delivered to the United States engineer office, Montgomery, Ala., War Department, 1915-16. Contract guaranties: 2 per cent moisture "as received"; 5.45 per cent ash and 14,750 B. t. u., "dry coal." Price, \$1.75 per ton (2,240 pounds) f. o. b. mine.

21. Bituminous coal delivered to the United States engineer office, Jacksonville and Tampa, Fla., War Department, 1916-17. Contract guaranties: 3 per cent moisture "as received"; 4 per cent ash and 14,900 B. t. u. "dry coal." Price, \$1.60 per ton f. o. b. mine.

22. Bituminous coal delivered to the United States engineer office, Mobile, Ala., Pascagoula and Gulfport, Miss., War Department, 1915-16. Contract guaranties: 2.97 per cent moisture "as received"; 7.185 per cent ash and 14,250 B. t. u. "dry coal." Price, \$1.38 per ton f. o. b. mine.

23. Bituminous coal delivered to the United States engineer office, Mobile, Ala., War Department, 1916-17. Contract guaranties: 3 per cent moisture "as received"; 4 per cent ash and 14,800 B. t. u. "dry coal." Price, \$1.50 per ton f. o. b. mine.

24. Bituminous coal delivered to the United States engineer office, New Orleans, La., War Department, 1915-16. Contract guaranties: 2.5 per cent moisture "as received"; 5 per cent ash and 14,750 B. t. u. "dry coal." Price, \$3.50 per ton delivered at Port Eads and Burwood, La.

25. Bituminous coal delivered to the United States engineer office, Burwood, La., War Department, 1916-17. Contract guaranties: 2 per cent moisture "as received"; 5 per cent ash and 14,800 B. t. u. "dry coal."

26. Bituminous coal delivered to Fort Screven, Ga., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 4 per cent moisture "as received"; 12 per cent ash and 13,000 B. t. u. "dry coal." Price, \$4.30 per ton.

27. Bituminous coal delivered to Fort Screven, Ga. Quartermaster Corps, War Department, 1915-16. Contract guaranties same as No. 26. Price, \$4.30 per ton.

28. Bituminous coal delivered to Fort Screven, Ga., Quartermaster Corps, War Department, 1916-17. Contract guaranties: 4 per cent moisture "as received"; 4 per cent ash and 14,400 B. t. u. "dry coal." Price, \$4.25 per ton delivered at fort and \$3.32 delivered in vessels at Savannah, Ga.

29. Bituminous coal delivered to Jackson Barracks, La., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 2 per cent moisture "as received"; 10 per cent ash and 13,500 B. t. u. "dry coal." Price, \$3.90 per ton.

30. Bituminous coal delivered to United States engineer office, Tuscaloosa, Ala., War Department, 1915-16. Contract guaranties: 6.26 per cent ash and 14,401 B. t. u. "dry coal." Price, \$1.10 per ton delivered f. o. b. barges at Mile 421, Mulberry Fork of Black Warrior River.

31. Bituminous coal delivered to the customhouse, New Orleans, La., Treasury Department, 1919-20. Contract guaranties: 8 per cent ash "dry coal," 13,550 B. t. u. "as received." Price, \$6.40 per ton (2,240 pounds).

ARKANSAS COALS.

32-34. Semibituminous coal. Samples collected for the Panama Railroad Co., July, 1918, at mines as coal was being loaded into railroad cars.

35. Semibituminous coal delivered to Fort Sill, Okla., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 3 per cent moisture "as received"; 10 per cent ash and 13,500 B. t. u. "dry coal." Price, \$5.30 per ton.

36. Semibituminous coal delivered to Fort Logan H. Roots, Ark., Quartermaster Corps, War Department, 1920-21. Contract guaranties: 1.6 per cent moisture "as received"; 10 per cent ash and 14,150 B. t. u. "dry coal." Price, \$6.31 f. o. b. mine.

37-41. Semibituminous coal. Samples collected for the Panama Railroad Co., June, 1918, at mines as coal was being loaded into railroad cars.

COLORADO COALS.

42. Anthracite coal delivered to the post office building, Denver, Colo., Treasury Department, 1915-16. Price, \$5.75 per ton (2,240 pounds).

43. Bituminous coal delivered to the Fitzsimons General Hospital, Denver, Colo., Quartermaster Corps, War Department, 1920-21. Contract guaranties: 4 per cent moisture "as received"; 12.15 per cent ash and 11,875 B. t. u. "dry coal." Price, \$5.75 per ton f. o. b. mines.

44. Bituminous coal delivered to Fort Logan, Colo., Quartermaster Corps, War Department, 1916-17. Contract guaranties: 0.9 per cent moisture "as received"; 9.2 per cent ash and 13,150 B. t. u. "dry coal." Price, \$1.60 per ton f. o. b. Pryor, Colo.

45. Bituminous coal delivered to Fort Bliss, Tex., Quartermaster Corps, War Department, 1919-20. Contract guaranties: 4.75 per cent moisture "as received"; 12 per cent ash and 12,000 B. t. u., "dry coal." Price, \$3.50 per ton before October 1; \$4 per ton after October 1, f. o. b. mines.

46. Bituminous coal delivered to Fort Bliss, Tex., Quartermaster Corps, War Department, 1916-17. Contract guaranties: 1.5 per cent moisture "as received"; 14 per cent ash, "dry coal." Price, \$5.20 per ton.

47. Bituminous coal delivered to Fort D. A. Russell, Wyo., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 1.2 per cent moisture, "as received"; 6.78 per cent ash and 13,700 B. t. u., "dry coal." Price, \$4.75 per ton.

48. Bituminous coal delivered to Fort Logan, Colo., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 1.2 per cent moisture; 6.78 per cent ash and 13,700 B. t. u., "dry coal." Price, \$3.65 per ton.

49. Bituminous coal delivered to the mint building, Denver, Colo., Treasury Department, 1915-16. Contract guaranties: 2 per cent moisture "as received"; 7 per cent ash and 13,500 B. t. u., "dry coal." Price, \$4.24 per ton (2,240 pounds).

50. Bituminous coal delivered to Fort Bliss, Tex., Quartermaster Corps, War Department, 1916-17. Contract guaranties: 3 per cent moisture, "as received"; 8 per cent ash and 13,500 B. t. u., "dry coal." Price, \$4.90 per ton.

51. Bituminous coal delivered to the mint building, Denver, Colo., Treasury Department, 1916-17. Contract guaranties: 2.5 per cent moisture, "as received"; 7 per cent ash and 13,600 B. t. u., "dry coal." Price, \$4.19 per ton (2,240 pounds).

52. Subbituminous coal delivered to Fitzsimons General Hospital, Denver, Colo., Quartermaster Corps, War Department, 1920-21. Contract guaranties: 24.63 per cent moisture, "as received"; 4.28 per cent ash and 11,381 B. t. u., "dry coal." Price, \$2.10 per ton f. o. b. mines.

ILLINOIS COALS.

53. Bituminous coal delivered to the United States Engineer Office, St. Louis, Mo., War Department, 1916-17.

54. Bituminous coal delivered to Office of Indian Affairs, Department of the Interior, 1916-17. Contract guaranties: 4.5 per cent moisture, "as received"; 8 per cent ash and 13,500 B. t. u., "dry coal." Prices, \$3.358 per ton for delivery at Pipestone Indian School, Minn.; \$5.938 per ton for delivery at Pierre Indian School, Pierre, S. Dak.; \$3.436 per ton for delivery at Tomah Indian School, Wis.

55. Bituminous coal delivered to Fort Leavenworth, Kans., Quartermaster Corps, War Department, 1916-17. Contract guaranties: 7 per cent moisture, "as received"; 8 per cent ash and 13,350 B. t. u., "dry coal." Price, \$4.443 per ton.

56. Bituminous coal delivered Fort Crook, Nebr., Quartermaster Corps, War Department, 1916-17. Contract guaranties: 7 per cent moisture, "as received"; 8 per cent ash and 13,350 B. t. u., "dry coal." Price, \$1.34 per ton f. o. b. Logan, Ill.

57. Bituminous coal delivered to Fort Sheridan, Ill., Quartermaster Corps, War Department, 1916-17. Contract guaranties: 5.5 per cent moisture, "as received"; 9 per cent ash and 13,230 B. t. u., "dry coal." Price, \$1.34 per ton f. o. b. Logan, Ill.

58. Bituminous coal delivered to the Genoa Indian School, Nebr., Office of Indian Affairs, Department of the Interior, 1916-17. Contract guaranties: 4.5 per cent moisture, "as received"; 8 per cent ash and 13,500 B. t. u., "dry coal." Price, \$4.177 per ton.

59. Bituminous coal delivered to Fort Des Moines, Iowa, Quartermaster Corps, War Department, 1916-17. Contract guaranties: 7 per cent moisture, "as received"; 8 per cent ash and 13,350 B. t. u., "dry coal." Price, \$1.34 per ton f. o. b. Logan, Ill.

60. Bituminous coal delivered to the United States penitentiary, Leavenworth, Kans., Department of Justice, 1916-17. Contract guaranties: 8 per cent moisture, "as received"; 10 per cent ash and 13,000 B. t. u., "dry coal." Price, \$1.20 per ton f. o. b. mines.

61. Bituminous coal delivered to Fort Crook, Nebr., Quartermaster Corps, War Department, 1916-17. Contract guaranties: 7 per cent moisture, "as received"; 8 per cent ash and 13,000 B. t. u., "dry coal." Price, \$1.18 per ton f. o. b. Logan, Ill.

62. Bituminous coal delivered to the Wahpeton Indian School, N. Dak., Office of Indian Affairs, Department of the Interior, 1916-17. Contract guaranties: 4.5 per cent moisture, "as received"; 8 per cent ash and 13,000 B. t. u., "dry coal." Price, \$3.391 per ton.

63. Bituminous coal delivered to post office building, St. Louis, Mo., Treasury Department, 1916-17. Contract guaranties: 12 per cent ash, "dry coal," 11,500 B. t. u., "as received." Price, \$2.15 per ton (2,240 pounds).

64. Bituminous coal delivered to Jefferson Barracks, Mo., Quartermaster Corps, War Department, 1919-20. Contract guaranties: 10 per cent moisture, "as received"; 10.05 per cent ash and 12,545 B. t. u., "dry coal." Price, \$3.225 per ton f. o. b. Jefferson Barracks, Mo.

65. Bituminous coal delivered to Jefferson Barracks, Mo., Quartermaster Corps, War Department, 1920-21. Contract guaranties: 10 per cent moisture, "as received"; 10.76 per cent ash and 12,500 B. t. u., "dry coal." Price, \$2.70 per ton f. o. b. mine.

66. Bituminous coal delivered to Jefferson Barracks, Mo., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 8 per cent moisture, "as received"; 12 per cent ash and 12,500 B. t. u., "dry coal." Price, \$2.19 per ton.

67. Bituminous coal delivered to Quartermaster Depot, St. Louis, Mo., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 10 per cent moisture, "as received"; 14 per cent ash and 12,500 B. t. u., "dry coal." Price, \$2.09 per ton.
68. Bituminous coal delivered to post office building, Chicago, Ill., Treasury Department, 1915-16. Contract guaranties: 8 per cent ash, "dry coal"; 11,800 B. t. u., "as received." Price, \$2.90 per ton (2,240 pounds).
69. Bituminous coal delivered to United States engineer office, East St. Louis, Ill., War Department, 1919-20. Contract guaranties: 7 per cent moisture, "as received"; 9 per cent ash and 13,175 B. t. u., "dry coal." Price, \$2.40 per ton f. o. b. mine.
70. Bituminous coal delivered to Mount Pleasant Indian School, Mich., Office of Indian Affairs, Department of the Interior, 1915-16. Contract guaranties: 8 per cent moisture, "as received"; 9 per cent ash and 13,075 B. t. u., "dry coal." Price, \$2.929 per ton.
71. Bituminous coal delivered to Fort Snelling, Minn., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 9 per cent moisture, "as received"; 8 per cent ash and 13,200 B. t. u., "dry coal." Price, \$1.29 per ton f. o. b. mines.
72. Bituminous coal delivered to post office building, St. Louis, Mo., Treasury Department, 1915-16. Contract guaranties: 12 per cent ash, "dry coal"; 11,400 B. t. u., "as received." Price, \$2.13 per ton (2,240 pounds).
73. Bituminous coal delivered to post office building, St. Louis, Mo., Treasury Department, 1919-20. Contract guaranties: 12 per cent ash, "dry coal"; 11,400 B. t. u., "as received." Price, \$4.12 per ton (2,240 pounds).
74. Bituminous coal delivered to United States engineer office, St. Louis, Mo., War Department, 1916-17.
75. Bituminous coal delivered to White Earth Indian School, Minn., Office of Indian Affairs, Department of the Interior, 1916-17. Price, \$1.45 per ton f. o. b. mines.
76. Bituminous coal delivered to Flandreau Indian School, Flandreau, S. Dak., Mount Pleasant Indian School, Mount Pleasant, Mich., and Tomah Indian School, Wis., Office of Indian Affairs, Department of the Interior, 1915-16. Contract guaranties: 6 per cent moisture "as received"; 9 per cent ash and 13,500 B. t. u., "dry coal." Price, \$1.25 per ton f. o. b. mine.
77. Bituminous coal delivered to Winnebago Indian Agency and Hospital, Winnebago, Nebr.; White Earth Indian Agency, Minn.; Tomah Indian School, Tomah, Wis.; Fort Totten Indian School, N. Dak.; Pipestone Indian School, Pipestone, Minn.; Leech Lake Indian School, Walker, Minn.; Lac du Flambeau Indian School and Agency, Wis.; Hayward Indian School, Wis.; and Flandreau Indian School, Flandreau, S. Dak.; Office of Indian Affairs, Department of the Interior, 1920-21. Contract guaranties: 6 per cent moisture, "as received"; 8.50 per cent ash and 13,300 B. t. u., "dry coal." Price, \$4.50 per ton f. o. b. mines.
78. Bituminous coal delivered to Genoa Indian School, Genoa, Nebr., and Mount Pleasant Indian School, Mount Pleasant, Mich., Office of Indian Affairs, Department of the Interior, 1920-21. Contract guaranties: 6 per cent moisture, "as received"; 8.50 per cent ash and 13,300 B. t. u., "dry coal." Price, \$4.50 per ton f. o. b. mines.
79. Bituminous coal delivered to Genoa Indian School, Genoa, Nebr., Office of Indian Affairs, Department of the Interior, 1915-16. Contract guaranties: 6 per cent moisture, "as received"; 9 per cent ash and 13,500 B. t. u., "dry coal." Price, \$4.003 per ton.
80. Bituminous coal delivered to Rock Island Arsenal, Rock Island, Ill., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 7 per cent moisture, "as received"; 9 per cent ash, and 13,000 B. t. u., "dry coal." Price, \$3.57 per ton in bins.
81. Bituminous coal delivered to Rock Island Arsenal, Rock Island, Ill., Quartermaster Corps, War Department, 1916-17. Contract guaranties: 7 per cent moisture, "as received," 9 per cent ash, and 13,100 B. t. u., "dry coal." Price, \$3.67 per ton.

82. Bituminous coal delivered to Fort Des Moines, Iowa, Quartermaster Corps, War Department, 1919-20. Contract guaranties: 10.50 per cent moisture, "as received"; 10 per cent ash and 13,100 B. t. u., "dry coal." Price, \$2.35 per ton f. o. b. mine.

83. Bituminous coal delivered to Fort Snelling, Minn., Quartermaster Corps, War Department, 1919-20. Contract guaranties: 10.50 per cent moisture, "as received"; 10 per cent ash and 13,100 B. t. u., "dry coal." Price, \$2.35 per ton f. o. b. mine.

84. Bituminous coal delivered to Sparta General Ordnance Depot, Sparta, Wis., Quartermaster Corps, War Department, 1919-20. Contract guaranties: 10.5 per cent moisture, "as received"; 10 per cent ash and 13,000 B. t. u., "dry coal." Price, \$2.35 per ton f. o. b. mine.

85. Bituminous coal delivered to Camp Grant, Ill., Quartermaster Corps, War Department, 1919-20. Contract guaranties: 10.5 per cent moisture, "as received"; 10 per cent ash and 13,000 B. t. u., "dry coal." Price, \$2.15 per ton f. o. b. mines.

86. Bituminous coal delivered to Rock Island Arsenal, Rock Island, Ill., Quartermaster Corps, War Department, 1919-20. Contract guaranties: 12 per cent moisture, "as received"; 9 per cent ash and 12,800 B. t. u., "dry coal." Price, \$2.43 per ton f. o. b. mine.

87. Bituminous coal delivered to Danville Branch of the National Home for Disabled Volunteer Soldiers, Danville, Ill., 1915-16. Contract guaranties: 13 per cent moisture, "as received"; 17 per cent ash and 12,000 B. t. u., "dry coal." Price, \$1.60 per ton.

88. Bituminous coal delivered to Danville Branch of the National Home for Disabled Volunteer Soldiers, Danville, Ill., 1916-17. Contract guaranties: 13 per cent moisture, "as received"; 17 per cent ash and 12,000 B. t. u., "dry coal." Price, \$1.75 per ton.

89. Bituminous coal delivered to Danville Branch of the National Home for Disabled Volunteer Soldiers, Danville, Ill., 1919-20. Contract guaranties: 13 per cent moisture, "as received"; 12,000 B. t. u., "dry coal." Price, \$2.62 per ton.

90. Bituminous coal delivered to Danville Branch of the National Home for Disabled Volunteer Soldiers, Danville, Ill., 1920-21. Contract guaranties: 11 per cent moisture, "as received"; 19 per cent ash and 11,700 B. t. u., "dry coal." Price, \$4.12 per ton (2,240 pounds).

91. Bituminous coal delivered to Fort Riley, Kans., Quartermaster Corps, War Department, 1916-17. Contract guaranties: 6.5 per cent moisture, "as received"; 9 per cent ash and 13,390 B. t. u., "dry coal." Price, \$1.35 per ton f. o. b. Herrin, Ill.

92. Bituminous coal delivered to Fort Riley, Kans., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 7.5 per cent moisture, "as received"; 8.2 per cent ash and 13,310 B. t. u., "dry coal." Price, \$1.24 per ton f. o. b. mines.

93. Bituminous coal delivered to Fort Sheridan, Ill., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 8 per cent moisture "as received"; 9.50 per cent ash and 13,000 B. t. u., "dry coal." Price, \$1.24 per ton f. o. b. Johnson City, Ill.

INDIANA COALS.

94. Bituminous coal delivered to the post office building, Chicago, Ill., Treasury Department, 1919-20. Contract guaranties: 8 per cent ash, "dry coal"; 12,194 B. t. u., "as received." Price, \$5.38 per ton (2,240 pounds).

IOWA COALS.

95. Bituminous coal delivered to Camp Dodge, Iowa, Quartermaster Corps, War Department, 1919-20. Contract guaranties: 17.5 per moisture, "as received"; 12.5 per cent ash and 12,470 B. t. u., "dry coal." Price, \$3.30 per ton f. o. b. mine.

96. Bituminous coal delivered to Camp Dodge, Iowa, Quartermaster Corps, War Department, 1919-20. Contract guaranties same as No. 95. Price, \$3.30 per ton f. o. b. mine.

KANSAS COALS.

97. Bituminous coal delivered to post office building, Omaha, Neb., Treasury Department, 1916-17. Contract guaranties: 12 per cent ash, "dry coal"; 12,500 B. t. u., "as received." Price, \$4.872 per ton (2,240 pounds).

98. Bituminous coal delivered to Fort Leavenworth, Kans., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 10 per cent moisture, "as received"; 15 per cent ash and 12,600 B. t. u., "dry coal." Price, \$2.52 per ton.

99. Bituminous coal delivered to the United States penitentiary, Leavenworth, Kans., Department of Justice, 1915-16. Contract guaranties: 10 per cent moisture, "as received"; 15 per cent ash and 12,200 B. t. u., "dry coal." Price, \$2.50 per ton.

100. Bituminous coal delivered to the United States disciplinary barracks, Fort Leavenworth, Kans., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 9 per cent moisture, "as received"; 15 per cent ash and 12,550 B. t. u., "dry coal." Price, \$2.52 per ton f. o. b. cars Leavenworth, Kans.

101. Bituminous coal delivered to the United States disciplinary barracks, Fort Leavenworth, Kans., Quartermaster Corps, War Department, 1916-17. Contract guaranties: 9 per cent moisture, "as received"; 15 per cent ash and 12,500 B. t. u., "dry coal." Price, \$2.60 per ton f. o. b. cars Leavenworth, Kans.

102. Bituminous coal delivered to the Western Branch of the National Home for Disabled Volunteer Soldiers, National Military Home, Kans., 1920-21. Contract guaranties: 9 per cent moisture, "as received"; 16 per cent ash and 11,750 B. t. u., "dry coal." Price, \$5.25 per ton.

KENTUCKY COALS.

103. Bituminous coal delivered to Fort Dade, Fla., Quartermaster Corps, War Department, 1916-17. Contract guaranties: 3 per cent moisture, "as received"; 6.5 per cent ash and 14,250 B. t. u., "dry coal." Price, \$8.25 per ton.

104-106. Bituminous coal. Samples collected for the Southern Appalachian Coal Operators Association, August, 1921, at mines as coal was being loaded into railroad cars.

107-109. Bituminous coal. Samples collected for the Southern Appalachian Coal Operators Association, July, 1921, at mines as coal was being loaded into railroad cars.

110. Bituminous coal. Samples collected for the Southern Appalachian Coal Operators Association, October, 1921, at mines as coal was being loaded into railroad cars.

111-118. Bituminous coal. Samples collected for the Southern Appalachian Coal Operators Association, August, 1921, at mines as coal was being loaded into railroad cars.

119. Bituminous coal. Samples collected for the Southern Appalachian Coal Operators Association, July, 1921, at mines as coal was being loaded into railroad cars.

120. Bituminous coal. Samples collected for the Southern Appalachian Coal Operators Association, September, 1921, at mines as coal was being loaded into railroad cars.

121-126. Bituminous coal. Samples collected for the Southern Appalachian Coal Operators Association, August, 1921, at mines as coal was being loaded into railroad cars.

127-129. Bituminous coal. Samples collected for the Southern Appalachian Coal Operators Association, September, 1921, at mines as coal was being loaded into railroad cars.

130. Bituminous coal. Samples collected for the United States Fuel Administration, January, 1919, at mines as coal was being loaded into railroad cars.

131-147. Bituminous coal. Samples collected for the Southern Appalachian Coal Operators Association, August, 1921, at mines as coal was being loaded into railroad cars.

148. Bituminous coal. Samples collected for the Southern Appalachian Coal Operators Association, September, 1921, at mines as coal was being loaded into railroad cars.

149-151. Bituminous coal. Samples collected for the Southern Appalachian Coal Operators Association, October, 1921, at mines as coal as being loaded into railroad cars.

152-159. Bituminous coal. Samples collected for the Southern Appalachian Coal Operators Association, August, 1921, at mines as coal was being loaded into railroad cars.

160. Bituminous coal. Samples collected for the Southern Appalachian Coal Operators Association, September, 1921, at mines as coal was being loaded into railroad cars.

161-163. Bituminous coal. Samples collected for the Southern Appalachian Coal Operators Association, August, 1921, at mines as coal was being loaded into railroad cars.

164-168. Bituminous coal. Samples collected for the Southern Appalachian Coal Operators Association, September, 1921, at mines as coal was being loaded into railroad cars.

169. Bituminous coal. Sample collected for the Southern Appalachian Coal Operators Association, December, 1921, at mines as coal was being loaded into railroad cars.

170. Bituminous coal delivered to the Marion Branch of the National Home for Disabled Volunteer Soldiers, National Military Home, Ind., 1916-17. Contract guaranties: 2 per cent moisture, "as received"; 8 per cent ash and 13,800 B. t. u., "dry coal." Price, \$2.39 per ton.

171-174. Bituminous coal. Samples collected for the Southern Appalachian Coal Operators Association, July, 1921, at mines as coal was being loaded into railroad cars.

175-181. Bituminous coal. Samples collected for the Southern Appalachian Coal Operators Association, October, 1921, at mines as coal was being loaded into railroad cars.

182. Bituminous coal delivered to Camp Knox, Ky., Quartermaster Corps, War Department, 1919-20. Contract guaranties: 4.29 per cent moisture, "as received"; 7.44 per cent ash and 13,200 B. t. u., "dry coal." Price, \$2.33 per ton f. o. b. mines.

183. Bituminous coal delivered to the Jeffersonville Quartermaster Depot, Ind., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 5.76 per cent moisture, "as received"; 12.27 per cent ash and 12,845 B. t. u., "dry coal." Price, \$0.85 per ton f. o. b. cars at Beaver Dam or McHenry, Ohio County, Ky.

184. Bituminous coal delivered to the United States engineer office, St. Louis, Mo., War Department, 1916-17.

185. Bituminous coal delivered to the United States engineer office, White River, Ark., and Greenville and Vicksburg, Miss., War Department, 1915-16. Contract guaranties: 3 per cent moisture, "as received"; 9 per cent ash and 13,200 B. t. u., "dry coal." Price, \$2.73 per ton at White River, \$3.23 per ton at Vicksburg, and \$2.85 per ton at Greenville.

186. Bituminous coal delivered to the United States engineer office, White River, Ark., and Greenville and Vicksburg, Miss., War Department, 1916-17. Contract guaranties same as No. 185. Price, \$3 per ton at White River, \$3.10 per ton at Greenville, Miss., and \$3.10 per ton at Vicksburg, Miss.

187. Bituminous coal delivered to the United States engineer office, White River, Ark., and Greenville and Vicksburg, Miss., War Department, 1916-17.

188. Bituminous coal delivered to the United States engineer office, White River, Ark., and Greenville and Vicksburg, Miss., War Department, 1916-1917. Contract guaranties: 3 per cent moisture, "as received"; 9 per cent ash and 13,200 B. t. u., "dry coal." Price, \$2.75 per ton at White River, Ark., \$2.90 per ton at Greenville, and \$3 per ton at Vicksburg.

189. Bituminous coal delivered to the United States engineer office, St. Louis, Mo., War Department, 1916-17.

190. Bituminous coal delivered to Fort Logan H. Roots, Ark., Quartermaster Corps, War Department, 1919-20. Contract guaranties: 3.5 per cent moisture, "as received"; 9 per cent ash and 13,250 B. t. u., "dry coal." Price, \$2.05 per ton f. o. b. mine.

191. Bituminous coal delivered to Fort Sam Houston, Tex., Quartermaster Corps, War Department, 1919-20. Contract guaranties: 2.5 per cent moisture, "as received"; 7 per cent ash and 13,400 B. t. u., "dry coal." Price, \$2.175 per ton f. o. b. mine.

MARYLAND COALS.

192. Semibituminous coal. Sample collected for the Navy Department, December, 1917, at mines as coal was being loaded into railroad cars.

193. Semibituminous coal delivered to the sewage pumping station, Washington, D. C., 1915-16. Contract guaranties: 2.5 per cent moisture, "as received"; 8 per cent ash and 14,250 B. t. u., "dry coal." Price, \$3.35 per ton (2,240 pounds).

194. Semibituminous coal delivered to the District of Columbia workhouse, Occoquan, Va., 1915-16. Contract guaranties: 3 per cent moisture, "as received"; 8 per cent ash and 14,250 B. t. u., "dry coal." Price, \$3.27 per ton (2,240 pounds).

195. Semibituminous coal delivered to the Naval Observatory, Washington, D. C., Navy Department, 1915-16. Contract guaranties: 2.5 per cent moisture, "as received"; 9 per cent ash and 14,150 B. t. u., "dry coal." Price, \$3.98 per ton (2,240 pounds).

196. Semibituminous coal delivered to the sewage pumping station, Washington, D. C., 1916-17. Contract guaranties: 2.5 per cent moisture, "as received"; 8 per cent ash and 14,250 B. t. u., "dry coal." Price, \$3.44 per ton (2,240 pounds).

197. Semibituminous coal delivered to the United States Soldiers' Home, Washington, D. C., War Department, 1915-16. Contract guaranties: 1.27 per cent moisture, "as received"; 6.29 per cent ash and 14,500 B. t. u., "dry coal." Price, \$3.40 per ton (2,240 pounds).

198. Semibituminous coal delivered to the General Land Office and Freedmen's Hospital, Washington, D. C., Department of the Interior, 1915-16. Contract guaranties: 2.25 per cent moisture, "as received"; 7.5 per cent ash and 14,400 B. t. u., "dry coal." Price, \$3.43 per ton (2,240 pounds).

199. Semibituminous coal delivered to Freedmen's Hospital, Washington, D. C., Department of the Interior, 1916-17. Contract guaranties: 2.25 per cent moisture, "as received"; 7.5 per cent ash and 14,400 B. t. u., "dry coal." Price, \$3.78 per ton (2,240 pounds).

200. Semibituminous coal delivered to the Government Printing Office, Washington, D. C., 1915-16. Contract guaranties: 2.25 per cent moisture, "as received"; 7.5 per cent ash and 14,400 B. t. u., "dry coal." Price, \$3.35 per ton (2,240 pounds).

201. Semibituminous coal delivered to the Government Printing Office, Washington, D. C., 1916-17. Contract guaranties: 2.25 per cent moisture, "as received"; 7.5 per cent ash and 14,400 B. t. u., "dry coal." Price, \$3.74 per ton (2,240 pounds).

202-203. Semibituminous coal. Samples collected for the Navy Department, December, 1917, at mines as coal was being loaded into railroad cars.

204. Semibituminous coal delivered to the Government fuel yards, Washington, D. C., Bureau of Mines, Department of the Interior, May, 1921. Contract guaranties: 1.33 per cent moisture, "as received"; 8.75 per cent ash and 14,317 B. t. u., "dry coal." Price, \$3.36 per ton (2,240 pounds) f. o. b. mine, up to October 1.

205. Semibituminous coal delivered to the United States engineer office, Wilmington, Del., 1915-16. Contract guaranties: 1.6 per cent moisture, "as received"; 9.5 per cent ash and 14,000 B. t. u., "dry coal." Price, \$3.95 per ton (2,240 pounds).

206. Semibituminous coal delivered to the United States engineer office, Wilmington, Del., 1916-17. Contract guaranties: 1.6 per cent moisture, "as received"; 10 per cent ash and 13,400 B. t. u., "dry coal." Price, \$4.25 per ton (2,240 pounds).

207. Semibituminous coal delivered to Fort Howard, Md., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 2 per cent moisture, "as received"; 10 per cent ash and 14,200 B. t. u., "dry coal." Price, \$2.50 per ton.

208. Semibituminous coal delivered to Fort Hancock, N. J., Quartermaster Corps, War Department, 1916-17. Contract guaranties: 2 per cent moisture, "as received"; 8.5 per cent ash and 14,200 B. t. u., "dry coal." Price, \$3.31 per ton f. o. b. Highland Branch, N. J.

209. Semibituminous coal delivered to the Government fuel yards, Washington, D. C., Bureau of Mines, Department of the Interior, May and June, 1921. Contract guaranties: 1.10 per cent moisture, "as received"; 10.10 per cent ash and 14,387 B. t. u., "dry coal." Price, \$3.64 per ton (2,240 pounds) f. o. b. mines.

MONTANA COALS.

210. Subbituminous coal delivered to Fort Keogh, Mont., Quartermaster Corps, War Department, 1916-17. Contract guaranties: 12 per cent moisture, "as received"; 9 per cent ash and 10,000 B. t. u., "dry coal." Price, \$2.95 per ton.

NEW MEXICO COALS.

211. Bituminous coal delivered to Fort Huachuca, Ariz., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 2 per cent moisture, "as received"; 13 per cent ash and 12,750 B. t. u., "dry coal." Price, \$8.95 per ton.

212. Bituminous coal delivered to Fort Huachuca, Ariz., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 2 per cent moisture, "as received"; 15 per cent ash and 12,250 B. t. u., "dry coal." Price, \$8.45 per ton.

213. Bituminous coal delivered to Fort Rosecrans, Calif., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 2 per cent moisture, "as received"; 10 per cent ash and 12,750 B. t. u., "dry coal." Price, \$2.10 per ton f. o. b. mine.

214. Bituminous coal delivered to Fort Rosecrans, Calif., Quartermaster Corps, War Department, 1916-17. Contract guaranties: 2.5 per cent moisture, "as received"; 10 per cent ash and 12,800 B. t. u., "dry coal." Price, \$1.75 per ton f. o. b. mine during July and August, 1916, and April, May and June, 1917; \$1.90 per ton during October, November, and December, 1916, and January, February, and March, 1917.

215. Subbituminous coal delivered to the Albuquerque Indian School, Albuquerque, N. Mex., Office of Indian Affairs, Department of the Interior, 1920-21. Contract guaranties: 10.7 per cent moisture, "as received"; 8.30 per cent ash and 12,000 B. t. u., "dry coal." Price, \$5.50 per ton f. o. b. mine during July, \$5.75 per ton f. o. b. mine during August, and \$6 per ton f. o. b. mine, September to June.

216. Bituminous coal delivered to the Jicarilla Indian School, Dulce, N. Mex., Office of Indian Affairs, Department of the Interior, 1919-20. Contract guaranties: 4.07 per cent moisture, "as received"; 8.83 per cent ash and 13,767 B. t. u., "dry coal." Price, \$3.25 per ton f. o. b. mine.

217. Bituminous coal delivered to the Jicarilla Indian School, Dulce, N. Mex., Office of Indian Affairs, Department of the Interior, 1920-21. Contract guaranties: 2.22 per cent moisture "as received"; 10 per cent ash and 13,000 B. t. u., "dry coal." Price, \$5 per ton f. o. b. mine.

218. Bituminous coal delivered to the Santa Fe Indian School, Santa Fe, N. Mex., Office of Indian Affairs, Department of the Interior, 1920-21. Contract guaranties:

2.22 per cent moisture, "as received"; 10 per cent ash and 13,000 B. t. u., "dry coal." Price, \$3.75 per ton f. o. b. mine.

219. Bituminous coal delivered to the Albuquerque Indian School, Albuquerque, N. Mex., Office of Indian Affairs, Department of the Interior, 1915-16. Contract guaranties: 1.5 per cent moisture, "as received"; 8 per cent ash and 12,700 B. t. u., "dry coal." Price, \$4.50 per ton.

220. Bituminous coal delivered to the Santa Fe Indian School, Santa Fe, N. Mex., Office of Indian Affairs, Department of the Interior, 1915-16. Contract guaranties: 1.5 per cent moisture, "as received"; 10 per cent ash and 12,500 B. t. u., "dry coal." Price, \$4.40 per ton.

221. Anthracite coal delivered to the Fort Bayard, N. Mex., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 3 per cent moisture, "as received"; 9.70 per cent ash and 13,250 B. t. u., "dry coal." Price, \$13 per ton.

NORTH DAKOTA COALS.

222. Lignite mined and used by the United States Reclamation Service, Williston, N. Dak., Department of the Interior, 1915-16.

OHIO COALS.

223. Bituminous coal delivered to the Columbus Barracks, Ohio, Quartermaster Corps, War Department, 1919-20. Contract guaranties: 2 per cent moisture, "as received"; 6 per cent ash and 14,500 B. t. u., "dry coal." Price, \$4.25 per ton.

224. Bituminous coal delivered to Columbus Barracks, Ohio, Quartermaster Corps, War Department, 1920-21. Contract guaranties: 7.5 per cent moisture, "as received"; 6.75 per cent ash and 13,100 B. t. u., "dry coal." Price, \$7.95 per ton.

225. Bituminous coal delivered to the Marion Branch of the National Home for Disabled Volunteer Soldiers, Marion, Ind., 1919-20. Contract guaranties: 2.65 per cent moisture, "as received"; 8.01 per cent ash and 13,200 B. t. u., "dry coal." Price, \$3.80 per ton.

OKLAHOMA COALS.

226-227. Semibituminous coal. Samples collected for the Panama Railroad Co., June, 1918, at mines as coal was being loaded into railroad cars.

228-232. Bituminous coal. Samples collected for the Panama Railroad Co., June, 1918, at mines as coal was being loaded into railroad cars.

233-238. Semibituminous coal. Samples collected for the Panama Railroad Co., June, 1918, at mines as coal was being loaded into railroad cars.

239. Bituminous coal delivered to Fort Reno, Okla., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 7 per cent moisture, "as received"; 8 per cent ash and 12,500 B. t. u., "dry coal." Price, \$1.80 per ton f. o. b. mine.

240. Bituminous coal delivered to the Cheyenne and Arapahoe Indian Agency, Kiowa Indian Agency and Hospital, Pawnee Indian School, and Fort Sill Indian School, Okla., Office of Indian Affairs, Department of the Interior, 1920-21. Contract guaranties: 7.13 per cent moisture, "as received"; 6.41 per cent ash and 13,240 B. t. u., "dry coal." Price, \$5.46 per ton f. o. b. mines.

241. Bituminous coal delivered to Camp Travis, Tex., Quartermaster Corps, War Department, 1919-20. Contract guaranties: 3 per cent moisture, "as received"; 9 per cent ash and 13,500 B. t. u., "dry coal." Price, \$4.74 per ton f. o. b. mine.

242. Bituminous coal delivered to Fort Sam Houston, Tex., Quartermaster Corps, War Department, 1920-21. Contract guaranties: 2.50 per cent moisture, "as received"; 8 per cent ash and 13,300 B. t. u., "dry coal." Price, \$5.75 per ton f. o. b. mine.

243-250. Bituminous coal. Samples collected for the Panama Railroad Co., June, 1918, at mines as coal was being loaded into railroad cars.

251. Bituminous coal delivered to the aviation repair depot, Dallas, Tex., Quartermaster Corps, War Department, 1919-20. Contract guaranties: 3.83 per cent moisture, "as received"; 12.39 per cent ash and 12.652 B. t. u., "dry coal." Price, \$4.50 per ton f. o. b. mine.

PENNSYLVANIA COALS.

252. Bituminous coal delivered to the post office building, Pittsburgh, Pa., Treasury Department, 1920-21. Price, \$6.10 per ton.

253. Bituminous coal delivered to the post office building, Pittsburgh, Pa., Treasury Department, 1919-20. Contract guaranties: 8 per cent ash, "dry coal"; 13,500 B. t. u., "as received." Price, \$4.45 per ton (2,240 pounds).

254. Semibituminous coal delivered to the Government fuel yards, Washington, D. C., Bureau of Mines, Department of the Interior, April, 1921. Contract guaranties: 0.60 per cent moisture, "as received"; 8.66 per cent ash and 14,050 B. t. u., "dry coal." Price, \$3.80 per ton (2,240 pounds) f. o. b. mine.

255. Semibituminous coal delivered to the Government fuel yards, Washington, D. C., Bureau of Mines, Department of the Interior, May, 1921. Contract guaranties: 1 per cent moisture, "as received"; 7.86 per cent ash and 14,495 B. t. u., "dry coal." Price, \$4.40 per ton (2,240 pounds) f. o. b. mine.

256. Semibituminous coal. Samples collected for the Navy Department, June, 1918, at mines as coal was being loaded into railroad cars.

257. Semibituminous coal delivered to the marine barracks, Philadelphia, Pa., United States Marine Corps, 1915-16. Contract guaranties: 2.5 per cent moisture, "as received"; 7.5 per cent ash and 14,250 B. t. u., "dry coal." Price, \$3.04 per ton (2,240 pounds).

258. Semibituminous coal delivered to the United States Naval Academy, Annapolis, Md., Navy Department, 1915-16. Contract guaranties: 2 per cent moisture, "as received"; 8 per cent ash and 14,400 B. t. u., "dry coal." Price, \$2.80 per ton (2,240 pounds).

259-260. Semibituminous coal. Samples collected for the Navy Department, June, 1918, at mines as coal was being loaded into railroad cars.

261. Semibituminous coal delivered to the Panama Railroad Co., New York, N. Y., 1915-16. Contract guaranty: 14,400 B. t. u., "dry coal." Price, \$3.02 per ton (2,240 pounds).

262. Semibituminous coal delivered to the Panama Railroad Co., New York, N. Y., 1916-17. Contract guaranty: 14,400 B. t. u., "dry coal." Price, \$3.30 per ton (2,240 pounds).

263. Semibituminous coal delivered to the United States navy yard, New York, N. Y., and Philadelphia, Pa., Navy Department, 1915-16.

264. Semibituminous coal delivered to the United States navy yard, New York, N. Y., and the United States navy yard, Philadelphia, Pa., Navy Department, 1916-17.

265-266. Semibituminous coal. Samples collected for the Navy Department, June, 1918, at mines as coal was being loaded into railroad cars.

267-268. Semibituminous coal. Samples collected for the Navy Department, August, 1918, at mines as coal was being loaded into railroad cars.

269. Semibituminous coal delivered to the United States engineer office, Philadelphia, Pa., War Department, 1915-16. Contract guaranties: 1.75 per cent moisture, "as received"; 6 per cent ash and 14,600 B. t. u., "dry coal." Price, \$2.83, \$2.98, and \$3.27 per ton (2,240 pounds) dependent upon type of vessel to which delivered.

270. Semibituminous coal delivered to the United States engineer office, Philadelphia, Pa., War Department, 1916-17. Contract guaranties: 1.75 per cent moisture

"as received"; 6 per cent ash and 14,600 B. t. u., "dry coal." Price, \$3.08, \$3.23, and \$3.52 per ton (2,240 pounds) dependent upon type of vessel to which delivered.

271. Bituminous coal delivered to the United States navy yard, Philadelphia, Pa., Navy Department, 1915-16.

272. Semibituminous coal delivered to the Philadelphia General Supply Depot, Philadelphia, Pa., Quartermaster Corps, War Department, 1919-20. Contract guaranties: 1.5 per cent moisture, "as received"; 9 per cent ash and 14,100 B. t. u., "dry coal." Price, \$2.60 per ton f. o. b. mine.

273-274. Semibituminous coal. Samples collected for the Navy Department, June, 1918, at mines as coal was being loaded into railroad cars.

275. Semibituminous coal. Samples collected for the Navy Department, August, 1918, at mines as coal was being loaded into railroad cars.

276. Semibituminous coal delivered to the Government fuel yards, Washington, D. C., Bureau of Mines, Department of the Interior, 1919. Contract guaranties: 1.50 to 2.95 per cent moisture, "as received"; 5.85 to 6.75 per cent ash and 14,625 to 14,745 B. t. u., "dry coal." Price, \$3.23 per ton (2,240 pounds) f. o. b. mine.

277-278. Semibituminous coal. Samples collected for the Navy Department, August, 1918, at mines as coal was being loaded into railroad cars.

279. Semibituminous coal delivered to the Springfield Armory, Springfield, Mass., War Department, 1915-16. Contract guaranties: 3.5 per cent moisture, "as received"; 6.5 per cent ash and 14,610 B. t. u., "dry coal." Price, \$3.90, \$3.95, and \$4.25 per ton, dependent upon method of delivery.

280. Semibituminous coal delivered to the Watertown Arsenal, Watertown, Mass., War Department, 1916-17. Contract guaranties: 3 per cent moisture, "as received"; 5.95 per cent ash and 14,610 B. t. u., "dry coal." Price, \$4.70 per ton (2,240 pounds).

281. Semibituminous coal delivered to the Springfield Armory, Springfield, Mass., War Department, 1916-17. Contract guaranties: 3.5 per cent moisture, "as received"; 6.50 per cent ash and 14,610 B. t. u., "dry coal." Price, \$4.13 per ton.

282. Semibituminous coal delivered to the Government fuel yards, Washington, D. C., Bureau of Mines, Department of the Interior, May, 1921. Contract guaranties: 1.48 per cent moisture, "as received"; 7.14 per cent ash and 14,600 B. t. u., "dry coal." Price, \$3.80 per ton (2,240 pounds) f. o. b. mines.

283. Semibituminous coal. Samples collected for the Navy Department, December, 1917, at mines as coal was being loaded into railroad cars.

284. Semibituminous coal. Samples collected for the Navy Department, June, 1918, at mines as coal was being loaded into railroad cars.

285-286. Semibituminous coal. Samples collected for the Navy Department, August, 1918, at mines as coal was being loaded into railroad cars.

287. Semibituminous coal delivered to the Government fuel yards, Washington, D. C., Bureau of Mines, Department of the Interior, May and June, 1921. Contract guaranties: 2.50 per cent moisture, "as received"; 7.50 per cent ash and 14,500 B. t. u., "dry coal." Price, \$4.07 per ton (2,240 pounds) f. o. b. mines.

288-289. Semibituminous coal. Samples collected for the Navy Department, June, 1918, at mines as coal was being loaded into railroad cars.

290. Semibituminous coal delivered to the Eastern Branch of the National Home for Disabled Volunteer Soldiers, Randolph, Me., 1919-20. Contract guaranties: 8 per cent ash and 14,400 B. t. u., "dry coal." Price, \$9.47 per ton (2,240 pounds) f. o. b. Randolph, Me.

291. Semibituminous coal delivered to the Department of Agriculture, Washington, D. C., 1915-16. Contract guaranties: 2 per cent moisture, "as received"; 7 per cent ash and 14,500 B. t. u., "dry coal." Price, \$3.26 per ton (2,240 pounds).

292. Semibituminous coal delivered to the Frankford Arsenal, Philadelphia, Pa., War Department, 1916-17. Contract guaranties: 3 per cent moisture, "as received"; 6 per cent ash and 14,600 B. t. u., "dry coal." Price, \$6.30 per ton.

293. Semibituminous coal delivered to the Frankford Arsenal, Philadelphia, Pa., War Department, 1919-20. Contract guaranties: 1.48 per cent moisture, "as received"; 5.93 per cent ash and 14,826 B. t. u., "dry coal." Price, \$2.80 per ton f. o. b. mines.

294. Semibituminous coal delivered to the Frankford Arsenal, Philadelphia, Pa., War Department, 1920-21. Contract guaranties: 2.10 per cent moisture, "as received"; 6 per cent ash and 14,300 B. t. u., "dry coal." Price, \$4 per ton f. o. b. mines.

295. Semibituminous coal. Samples collected for the Navy Department, August, 1918, at mines as coal was being loaded into railroad cars.

296. Semibituminous coal. Samples collected for the Navy Department, December, 1917, at mines as coal was being loaded into railroad cars.

297. Semibituminous coal delivered to the Government fuel yards, Washington, D. C., Bureau of Mines, Department of the Interior, April, 1921. Contract guaranties: 1.5 per cent moisture, "as received"; 5.5 per cent ash and 14,400 B. t. u., "dry coal." Price, \$3.65 per ton (2,240 pounds), f. o. b. mines.

298. Semibituminous coal delivered to the New York depot, Quartermaster Corps, War Department, 1916-17. Contract guaranties: 2.75 per cent moisture, "as received"; 7 per cent ash and 14,200 B. t. u., "dry coal." Price, \$2.94 per ton f. o. b. vessels at Port Liberty, N. J.

299. Semibituminous coal delivered to the New York appraisers warehouse, Treasury Department, New York City, N. Y., 1916-17. Contract guaranties: 6 per cent ash, "dry coal"; and 14,300 B. t. u., "as received." Price, \$3.69 per ton (2,240 pounds).

300. Semibituminous coal delivered to the Tullytown Arsenal, Tullytown, Pa., War Department, 1919-20. Contract guaranties: 0.40 per cent moisture, "as received"; 6.50 per cent ash and 14,600 B. t. u., "dry coal." Price, \$2.95 per ton f. o. b. mines.

301. Semibituminous coal delivered to the Government fuel yards, Washington, D. C., Bureau of Mines, Department of the Interior, March and April, 1921. Contract guaranties: 2.23 per cent moisture, "as received"; 8 per cent ash and 14,380 B. t. u., "dry coal." Price, \$3.54 per ton (2,240 pounds) f. o. b. mines.

302. Bituminous coal delivered to the New York depot, Quartermaster Corps, War Department, 1915-16. Contract guaranties: 3 per cent moisture, "as received"; 6.80 per cent ash and 14,390 B. t. u., "dry coal." Price, \$2.689 per ton f. o. b. Port Liberty, N. J.

303. Bituminous coal delivered to the third lighthouse district, New York Harbor, Bureau of Lighthouses, Department of Commerce, 1915-16. Contract guaranties: 10 per cent ash and 13,800 B. t. u., "dry coal." Price, \$2.92 per ton (2,240 pounds).

304. Bituminous coal delivered to the third lighthouse district, New York Harbor, Bureau of Lighthouses, Department of Commerce, 1916-17. Contract guaranties: 3.25 per cent moisture, "as received"; 7.25 per cent ash and 14,350 B. t. u., "dry coal." Price, \$3.24 per ton (2,240 pounds).

305-306. Semibituminous coal. Sample collected for the Navy Department, June, 1918, at mines as coal was being loaded into railroad cars.

307. Semibituminous coal delivered to the Government fuel yard, Washington, D. C., Bureau of Mines, Department of the Interior, May 1921. Contract guaranties: 2 per cent moisture, "as received"; 8 per cent ash and 14,500 B. t. u., "dry coal." Price, \$3.91 per ton (2,240 pounds) f. o. b. mines.

308. Semibituminous coal delivered to the Government fuel yard, Washington, D. C., Bureau of Mines, Department of the Interior, June, 1919. Contract guaranties: 1.74 per cent moisture, "as received"; 7 per cent ash and 14,500 B. t. u., "dry coal." Price, \$2.95 per ton (2,240 pounds) f. o. b. mines.

309. Semibituminous coal delivered to the Government fuel yard, Washington, D. C., Bureau of Mines, Department of the Interior, June, July, August, and September, 1919. Contract guaranties: 1.74 per cent moisture, "as received"; 7 per cent ash and 14,500 B. t. u., "dry coal." Price, \$2.95 per ton (2,240 pounds) f. o. b. mines.

310. Semibituminous coal delivered to the Government Hospital for the Insane, Department of the Interior, Washington, D. C., 1915-16. Contract guaranties: 2 per cent moisture, "as received"; 7 per cent ash and 14,500 B. t. u., "dry coal." Price, \$2.88 per ton (2,240 pounds).

311. Semibituminous coal delivered to the Government Hospital for the Insane, Department of the Interior, Washington, D. C., 1916-17. Contract guaranties: 2 per cent moisture, "as received"; 7 per cent ash and 14,500 B. t. u., "dry coal." Price, \$3.20 per ton (2,240 pounds).

312. Semibituminous coal delivered to the Government fuel yard, Washington, D. C., Bureau of Mines, Department of the Interior, June, 1921. Contract guaranties: 1.33 per cent moisture, "as received"; 8.20 per cent ash and 14,250 B. t. u., "dry coal." Price, \$3.53 per ton (2,240 pounds) f. o. b. mines.

313. Semibituminous coal delivered to United States Soldiers' Home, Washington, D. C., War Department, 1915-16. Contract guaranties: 2.50 per cent moisture, "as received"; 10.30 per cent ash and 13,950 B. t. u., "dry coal." Price, \$3.40 per ton (2,240 pounds).

314. Semibituminous coal delivered to the District of Columbia pumping station, Washington, D. C., 1915-16. Contract guaranties: 1.60 per cent moisture, "as received"; 8.50 per cent ash and 14,100 B. t. u., "dry coal." Price, \$3.25 per ton (2,240 pounds).

315. Semibituminous coal delivered to the filtration plant, Washington, D. C., War Department, 1915-16. Contract guaranties: 2.50 per cent moisture, "as received"; 8.50 per cent ash and 14,100 B. t. u., "dry coal." Price, \$2.893 per ton (2,240 pounds).

316. Semibituminous coal delivered to the Washington Asylum and Jail, Washington, D. C., 1915-16. Contract guaranties: Same as No. 315. Price, \$3.45 per ton (2,240 pounds).

317. Semibituminous coal delivered to the National Training School for Boys, Washington, D. C., 1915-16. Contract guaranties: 2.50 per cent moisture, "as received"; 10.30 per cent ash and 13,950 B. t. u., "dry coal." Price, \$3.55 per ton (2,240 pounds) delivered to power house; \$3.70 per ton (2,240 pounds) delivered to brickyard.

318. Semibituminous coal delivered to the National Zoological Park, Washington, D. C., Smithsonian Institution, 1915-16. Contract guaranties: Same as No. 317. Price, \$3.70 per ton (2,240 pounds).

319. Semibituminous coal delivered to the United States Soldiers' Home, District Pumping Station, and Home for the Aged and Infirm, Washington, D. C., 1916-17. Contract guaranties: 2.50 per cent moisture, "as received"; 8.50 per cent ash and 14,100 B. t. u., "dry coal." Price, \$3.60 per ton (2,240 pounds) delivered at Soldiers' Home, \$3.52 per ton at the District Pumping Station, and \$3.98 per ton at the Home for the Aged and Infirm.

320. Semibituminous coal delivered to the Government fuel yard, Washington, D. C., Bureau of Mines, Department of the Interior, 1918-19. Contract guaranties: 2.10 per cent moisture, "as received"; 8 per cent ash 14,400 B. t. u., "dry coal." Price, \$2.63 per ton (2,240 pounds) f. o. b. mines.

321. Semibituminous coal delivered to the Springfield Armory, Springfield, Mass., War Department, 1919-20. Contract guaranties: 2 per cent moisture, "as received"; 7.50 per cent ash and 14,500 B. t. u., "dry coal." Price, \$2.94 per ton f. o. b. mines.

322. Semibituminous coal delivered to the Government fuel yard, Washington, D. C., Bureau of Mines, Department of the Interior, June, 1921. Contract guaranties:

2.23 per cent moisture, "as received"; 8.07 per cent ash and 14,400 B. t. u., "dry coal." Price, \$3.695 per ton (2,240 pounds) f. o. b. mines.

323. Semibituminous coal delivered to the Government fuel yard, Washington, D. C., Bureau of Mines, Department of the Interior, June, 1921. Contract guaranties: 0.78 to 1.21 per cent moisture, "as received"; 6.19 to 8.34 per cent ash and 14,245 to 14,669 B. t. u., "dry coal." Price, \$3.91 per ton (2,240 pounds) f. o. b. mines.

324. Semibituminous coal delivered to the third lighthouse district, New London, Conn., Bureau of Lighthouses, Department of Commerce, 1915-16. Contract guaranties: 4 per cent moisture, "as received"; 12 per cent ash and 13,600 B. t. u., "dry coal." Price, \$3.70 per ton (2,240 pounds).

325. Semibituminous coal delivered to the Government fuel yard, Washington, D. C., Bureau of Mines, Department of the Interior, May, 1921. Contract guaranties: 1.25 per cent moisture, "as received"; 9.25 per cent ash and 14,230 B. t. u., "dry coal." Price, \$3.25 per ton (2,240 pounds) f. o. b. mines.

326. Semibituminous coal. Samples collected for the Navy Department, December, 1917, at mines as coal was being loaded into railroad cars.

327. Semibituminous coal delivered to the Government fuel yards, Washington, D. C., Bureau of Mines, Department of the Interior, April, 1921. Contract guaranties: 2.40 per cent moisture, "as received"; 8.75 per cent ash and 14,200 B. t. u., "dry coal." Price, \$3.59 per ton (2,240 pounds) f. o. b. mines.

328. Semibituminous coal delivered to the Government fuel yards, Washington, D. C., Bureau of Mines, Department of the Interior, April, 1921. Contract guaranties: 2.40 per cent moisture, "as received"; 8.75 per cent ash and 14,200 B. t. u., "dry coal." Price, \$3.59 per ton (2,240 pounds) f. o. b. mines.

329. Semibituminous coal delivered to the Government fuel yards, Washington, D. C., Bureau of Mines, Department of the Interior, May, 1921. Contract guaranties: 1.84 per cent moisture, "as received"; 8.90 per cent ash and 14,366 B. t. u., "dry coal." Price, \$3.50 per ton (2,240 pounds) f. o. b. mines.

330. Semibituminous coal delivered to the Government fuel yard, Washington, D. C., Bureau of Mines, Department of the Interior, May and June, 1921. Contract guaranties: 2 per cent moisture, "as received"; 8 per cent ash and 14,500 B. t. u., "dry coal." Price, \$3.91 per ton (2,240 pounds) f. o. b. mines.

331. Bituminous coal delivered to the Yankton Indian School, S. Dak., Office of Indian Affairs, Department of the Interior, 1916-17. Price, \$3.35 per ton f. o. b. Duluth, Minn.

332-333. Bituminous coal delivered to the Government fuel yards, Washington, D. C., Bureau of Mines, Department of the Interior, June, 1921.

334. Bituminous coal delivered to United States courthouse and post office, Milwaukee, Wis., Treasury Department, 1915-16. Contract guaranties: 8 per cent ash, "dry coal"; 13,100 B. t. u., "as received." Price, \$2.80 per ton (2,240 pounds).

335. Bituminous coal delivered to the United States courthouse and post office, Milwaukee, Wis., Treasury Department, 1916-17. Contract guaranties: 8 per cent ash, "dry coal"; 12,900 B. t. u., "as received." Price, \$3.65 per ton (2,240 pounds).

336. Bituminous coal delivered to Wahpeton Indian School, Wahpeton, N. Dak., Office of Indian Affairs, Department of the Interior, 1915-16. Contract guaranties: 1.5 per cent moisture, "as received"; 4.75 per cent ash and 14,650 B. t. u., "dry coal." Price, \$3.601 per ton.

TENNESSEE COALS.

337-338. Bituminous coal. Samples collected for the Southern Appalachian Coal Operators Association, December, 1921, at mines as coal was being loaded into railroad cars.

339. Bituminous coal. Samples collected for the Southern Appalachian Coal Operators Association, September, 1921, at mines as coal was being loaded into railroad cars.

340. Bituminous coal. Samples collected for the Southern Appalachian Coal Operators Association, July, 1921, at mines as coal was being loaded into railroad cars.

341. Bituminous coal delivered to the United States penitentiary, Atlanta, Ga., Department of Justice, 1916-17. Contract guaranties: 1.75 per cent moisture, "as received"; 6 per cent ash and 14,200 B. t. u., "dry coal." Price, \$2.60 per ton.

342-354. Bituminous coal. Samples collected for the Southern Appalachian Coal Operators Association, July, 1921, at mines as coal was being loaded into railroad cars.

355. Bituminous coal delivered to the United States penitentiary, Atlanta, Ga., Department of Justice, 1915-16. Contract guaranties: 1.5 per cent moisture, "as received"; 6 per cent ash and 14,100 B. t. u., "dry coal." Price, \$2.47 per ton.

356. Bituminous coal. Samples collected for the Southern Appalachian Coal Operators Association, August, 1921, at mines as coal was being loaded into railroad cars.

357. Bituminous coal delivered to the Old Hickory Powder Plant, Jacksonville, Tenn., War Department, 1919-20. Contract guaranties: 1.35 per cent moisture, "as received"; 8.25 per cent ash and 14,100 B. t. u., "dry coal." Price, \$3.15 per ton f. o. b. mines.

358. Bituminous coal delivered to Fort Oglethorpe, Ga., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 1.5 per cent moisture, "as received"; 7.5 per cent ash and 14,400 B. t. u., "dry coal." Price, \$2.95 per ton.

359. Bituminous coal delivered to Fort McPherson, Ga., Quartermaster Corps, War Department, 1919-20. Contract guaranties: 1.5 per cent moisture, "as received"; 7.9 per cent ash and 14,000 B. t. u., "dry coal." Price, \$3.25 per ton f. o. b. mines.

360-361. Bituminous coal. Samples collected for the Southern Appalachian Coal Operators Association, October, 1921, at mines as coal was being loaded into railroad cars.

TEXAS COALS.

362. Bituminous coal delivered to Fort Clark, Tex., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 8.16 per cent moisture, "as received"; 20.20 per cent ash and 10,500 B. t. u., "dry coal." Price, \$5.25 per ton.

363. Bituminous coal delivered to Camp Eagle Pass, Tex., Quartermaster Corps, War Department, 1920-21. Contract guaranties: 6.5 per cent moisture, "as received"; 23.86 per cent ash and 10,520 B. t. u., "dry coal." Price, \$6 per ton.

364. Bituminous coal delivered to Fort McIntosh, Tex., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 4 per cent moisture, "as received"; 13.5 per cent ash and 12,000 B. t. u., "dry coal." Price, \$4.50 per ton.

365. Bituminous coal delivered to Fort Sam Houston and Fort McIntosh, Tex., Quartermaster Corps, War Department, 1916-17. Contract guaranties: 3.7 per cent moisture, "as received"; 13.5 per cent ash and 12,500 B. t. u., "dry coal." Price, \$5.25 per ton delivered to Fort Sam Houston and \$4.50 per ton to Fort McIntosh.

UTAH COALS.

366. Bituminous coal delivered to Fort Douglas, Utah, Quartermaster Corps, War Department, 1915-16. Contract guaranties: 4.1 per cent moisture, "as received"; 5.9 per cent ash and 13,558 B. t. u., "dry coal." Price, \$4.65 per ton.

367. Bituminous coal delivered to the Benicia Arsenal and Presidio of Monterey, Calif., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 2.5 per cent moisture, "as received"; 3.5 per cent ash and 13,810 B. t. u., "dry coal." Price, f. o. b. Kenilworth Junction, Utah, \$2 per ton for July and August and April to June, inclusive; \$2.30 for September and October; \$2.50 for November and December; \$2.75 for January to March, inclusive.

368. Bituminous coal delivered to Presidio of San Francisco, Fort Miley, Presidio of Monterey, Fort Winfield Scott and Fort Barry, Calif., Quartermaster Corps, War

Department, 1916-17. Contract guaranties: 2.5 per cent moisture, "as received"; 4.5 per cent ash and 13,500 B. t. u., "dry coal." Price, \$1.75 per ton f. o. b. mines.

369. Bituminous coal delivered to Fort Hall Indian School, Fort Hall, Idaho, Office of Indian Affairs, Department of the Interior, 1919-20. Contract guaranties: 3 per cent moisture, "as received"; 6 per cent ash and 13,600 B. t. u., "dry coal." Price, \$3.25 per ton f. o. b. cars Standardville, Utah.

370. Bituminous coal delivered to Fort Hall Indian School, Fort Hall, Idaho, Office of Indian Affairs, Department of the Interior, 1920-21. Contract guaranties: 5 per cent moisture, "as received"; 8 per cent ash and 13,500 B. t. u., "dry coal." Price, \$3.55 per ton f. o. b. mines.

371. Bituminous coal delivered to Carson Indian School, Nev., Office of Indian Affairs, Department of the Interior, 1920-21. Contract guaranties: 6 per cent moisture, "as received"; 7 per cent ash and 13,000 B. t. u., "dry coal." Price, \$3.65 per ton f. o. b. mines.

372. Bituminous coal delivered to Fort McDowell, Calif., Quartermaster Corps, War Department, 1920-21. Contract guaranties: 1.24 per cent moisture, "as received"; 4.84 per cent ash and 13,750 B. t. u., "dry coal." Price, \$11.57 per ton delivered.

373. Bituminous coal delivered to Fort McDowell and Alcatraz Island, Calif., Quartermaster Corps, War Department, 1920-21. Contract guaranties: Same as No. 372. Price, \$10.52 per ton delivered.

374. Bituminous coal delivered to Fort McDowell, Calif., Quartermaster Corps, War Department, 1919-20. Price, \$10.95 per ton.

375. Bituminous coal delivered to Fort McDowell, Calif., Quartermaster Corps, War Department, 1919-20. Price, \$10.85 per ton.

VIRGINIA COALS.

376-384. Bituminous coal. Samples collected for the Southern Appalachian Coal Operators Association, September, 1921, at mines as coal was being loaded into railroad cars.

385. Semibituminous coal. Sample collected for the Navy Department, February-March, 1918, at piers as coal was being loaded into vessels.

386. Semibituminous coal. Sample collected for the Navy Department, December, 1917, to June, 1918, at piers as coal was being loaded into vessels.

387. Semibituminous coal. Sample collected for the Navy Department, April to June, 1918, at piers as coal was being loaded into vessels.

388. Bituminous coal delivered to the United States engineer office, Savannah, Ga., War Department, 1915-16. Contract guaranties: 2 per cent moisture, "as received"; 6 per cent ash and 14,750 B. t. u., "dry coal." Price, \$3.79 per ton (2,240 pounds).

389. Bituminous coal delivered to marine barracks, Port Royal, S. C., United States Marine Corps, 1916-17. Contract guaranties: 1.19 per cent moisture, "as received"; 6.4 per cent ash and 14,289 B. t. u., "dry coal." Price, \$3.49 per ton (2,240 pounds).

390. Bituminous coal delivered 1915-16. Contract guaranties: 2 per cent moisture, "as received"; 8 per cent ash and 14,000 B. t. u., "dry coal." Prices, \$3.36 per ton (2,240 pounds) delivered to the navy yard, Charleston, S. C., Navy Department; \$1.55 per ton delivered to the Mountain Branch, National Home for Disabled Volunteer Soldiers, National Soldiers' Home, Tenn.; \$3.30 per ton delivered to the United States engineers office, Georgetown, S. C., War Department; and \$3.90 per ton (2,240 pounds) on deck or \$4.10 per ton (2,240 pounds) trimmed in bunkers of vessels of the sixth lighthouse district, Charleston, S. C., Bureau of Lighthouses, Department of Commerce.

391. Bituminous coal delivered to the sixth lighthouse district, Charleston, S. C., Bureau of Lighthouses, Department of Commerce, 1916-17, and to the Mountain Branch of the National Home for Disabled Volunteer Soldiers, National Soldiers' Home, Tenn., 1916-17. Contract guaranties: Same as No. 390. Prices, sixth lighthouse district, \$4 per ton (2,240 pounds) on deck of vessels; National Home, \$1.85 per ton.

WASHINGTON COALS.

392. Briquets delivered to the marine barracks, Puget Sound, Wash., United States Marine Corps, Alaskan Engineering Commission, and the United States engineer office at Pacific Coast ports, 1915-16.

393. Briquets delivered to Pacific Coast forts, Quartermaster Corps, War Department, and to the marine barracks, Puget Sound, Wash., United States Marine Corps, 1916-17.

394. Bituminous coal delivered to the Cushman Indian School, Tacoma, Wash., Office of Indian Affairs, Department of the Interior, 1919-20. Contract guaranties: 3.55 per cent moisture, "as received"; 12.50 per cent ash and 12,600 B. t. u., "dry coal." Price, \$3.45 per ton f. o. b. Cumberland, Wash.

395. Bituminous coal delivered to the United States engineer's office, Fort Stevens, Oreg., War Department, 1915-16. Contract guaranties: 5 per cent moisture, "as received"; 14 per cent ash and 12,300 B. t. u., "dry coal." Price, \$2.35 per ton (2,240 pounds) f. o. b. Durham, Wash.

396. Bituminous coal delivered to the United States engineer's office, Fort Stevens, Oreg., War Department, 1916-17. Contract guaranties: 4 per cent moisture, "as received"; 14 per cent ash and 12,300 B. t. u., "dry coal." Price, \$2.20 per ton (2,240 pounds) f. o. b. Durham, Wash.

397. Subbituminous coal delivered to Fort Worden, Wash., Quartermaster Corps, War Department, 1920-21. Contract guaranties: 8 per cent moisture, "as received"; 14 per cent ash and 11,500 B. t. u., "dry coal." Price, \$8.80 per ton f. o. b. bins.

398. Subbituminous coal delivered to Forts Casey and Worden, Wash., Quartermaster Corps, War Department, 1919-20. Contract guaranties: Same as number 397. Prices, Fort Casey \$9.55 per ton, Fort Worden \$8.55 per ton.

399. Bituminous coal delivered to Fort George Wright, Wash., Quartermaster Corps, War Department, 1916-17. Contract guaranties: 3 per cent moisture, "as received"; 13.7 per cent ash and 12,550 B. t. u., "dry coal." Price, f. o. b. Roslyn, Wash., \$2.75 per ton July, August, and September, \$2.90 per ton October to June, inclusive.

400. Bituminous coal delivered to Vancouver Barracks, Wash., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 3 per cent moisture, "as received"; 12 per cent ash and 13,000 B. t. u., "dry coal." Price, \$3.35 per ton.

401. Bituminous coal delivered to Vancouver Barracks, Wash., Quartermaster Corps, War Department, 1916-17. Contract guaranties: 4 per cent moisture, "as received"; 11 per cent ash and 13,200 B. t. u., "dry coal."

402. Bituminous coal delivered to Fort Lawton, Wash., Quartermaster Corps, War Department, 1916-17. Contract guaranties: 3 per cent moisture, "as received"; 11 per cent ash and 13,000 B. t. u., "dry coal." Price, \$6.15 per ton.

403. Bituminous coal delivered to Fort Stevens, Oreg., Quartermaster Corps, War Department, 1916-17. Contract guaranties: 3 per cent moisture, "as received"; 10 per cent ash and 13,250 B. t. u., "dry coal." Price, \$3.54 per ton f. o. b. Wingate, Wash.

WEST VIRGINIA COALS.

404. Bituminous coal delivered to the Government fuel yards, Bureau of Mines, Department of the Interior, Washington, D. C., April, 1921. Contract guaranties: 1.19 per cent moisture, "as received"; 12 per cent ash and 12,750 B. t. u., "dry coal." Price, \$2.52 per ton (2,240 pounds) f. o. b. mines.

405. Bituminous coal. Sample collected for the Sewalls Point Coal Exchange in October, 1920, at mines as coal was being loaded into railroad cars.

406. Bituminous coal delivered to the Central Branch of the National Home for Disabled Volunteer Soldiers, National Soldiers' Home, Ohio, 1915-16. Contract guaranties: 1.16 per cent moisture, "as received"; 6.31 per cent ash and 14,000 B. t. u., "dry coal." Price, \$2.49 per ton.

407. Bituminous coal delivered to the United States engineer office, at various harbors, East Shore Lake, Grand Rapids, Mich., 1915-16. Contract guaranties: 2 per cent moisture, "as received"; 5.91 per cent ash and 14,300 B. t. u., "dry coal." Price, \$3.05 per ton at St. Joseph, South Haven, Holland, Grand Haven, and Muskegon; \$3.25 at Ludington, Manistee, and Frankfort; \$3.40 at Charlevoix, Mich.

408. Bituminous coal delivered to the United States engineer office, Grand Rapids, Mich., War Department, 1916-17. Contract guaranties: 1.90 per cent moisture, "as received"; 5.50 per cent ash and 14,400 B. t. u., "dry coal." Price per ton, \$3.08 at St. Joseph, South Haven, Holland, Grand Haven, and Muskegon; \$3.30 at Ludington, Manistee, and Frankfort; and \$3.40 at Charlevoix, Mich.

409-410. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, October, 1920, at mines as coal was being loaded into railroad cars.

411. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, November, 1920, at mines as coal was being loaded into railroad cars.

412. Bituminous coal. Sample collected for the Sewalls Point Coal Exchange, October, 1920, at mines as coal was being loaded into railroad cars.

413. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, October, 1920, at mines as coal was being loaded into railroad cars.

414. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, November, 1920, at mines as coal was being loaded into railroad cars.

415. Semibituminous coal. Sample collected for the Navy Department at Newport News, Va., May, 1918, as coal was being loaded into vessels.

416-417. Bituminous coal. Samples collected for the Sewalls Point Coal Exchange, October, 1920, and March, 1921, at mines as coal was being loaded into railroad cars.

418. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, November, 1920, at mine as coal was being loaded into railroad cars.

419. Bituminous coal. Sample collected for the Sewalls Point Coal Exchange, October, 1920, at mines as coal was being loaded into railroad cars.

420. Semibituminous coal. Sample collected for the Navy Department, at Newport News, Va., May, 1918, as coal was being loaded into vessels.

421. Semibituminous coal. Sample collected for the Navy Department, September, 1918, at mine as coal was being loaded into railroad cars.

422. Semibituminous coal. Sample collected for the Navy Department at Newport News, Va., May, 1918, as coal was being loaded into vessels.

423-424. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, October, 1920, at mines as coal was being loaded into railroad cars.

425. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, March, 1921, at mines as coal was being loaded into railroad cars.

426-427. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, October, 1920, at mines as coal was being loaded into railroad cars.

428. Semibituminous coal delivered to the Government fuel yards, Washington, D. C., Bureau of Mines, Department of the Interior, 1918-19. Contract guaranties: 2.5 per cent moisture, "as received"; 5 per cent ash and 14,800 B. t. u., "dry coal." Price, \$3.02 per ton (2,240 pounds) f. o. b. mines.

429. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, October, 1920, at mines as coal was being loaded into railroad cars.

430. Semibituminous coal delivered to the Government fuel yards, Washington, D. C., Bureau of Mines, Department of the Interior, 1918-19. Contract guaranties: 2.5 per cent moisture, "as received"; 5 per cent ash and 14,800 B. t. u., "dry coal." Price, \$3.02 per ton (2,240 pounds) f. o. b. mines.
431. Semibituminous coal delivered to the Government fuel yards, Washington, D. C., Bureau of Mines, Department of the Interior, 1918-19. Contract guaranties: Same as No. 430. Price, \$3.02 per ton (2,240 pounds) f. o. b. mines.
432. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, November, 1920, at mine as coal was being loaded into railroad cars.
433. Bituminous coal. Sample collected for the Sewalls Point Coal Exchange, July, 1921, at mine as coal was being loaded into railroad cars.
- 434-435. Bituminous coal. Sample collected for the Sewalls Point Coal Exchange, October, 1920, at mine as coal was being loaded into railroad cars.
436. Semibituminous coal delivered to the Bureau of Engraving and Printing, Washington, D. C., Treasury Department, 1915-16. Contract guaranties: 3.5 per cent moisture, "as received"; 6 per cent ash and 14,600 B. t. u., "dry coal." Price, \$3.08 per ton (2,240 pounds).
437. Semibituminous coal delivered to the main building of the Department of Agriculture and Treasury Building, Washington, D. C., 1915-16. Contract guaranties: 3 per cent moisture, "as received"; 5 per cent ash and 14,800 B. t. u., "dry coal." Price, \$3.36 per ton (2,240 pounds) delivered to Department of Agriculture and \$3.65 per ton (2,240 pounds) to the Treasury Building.
438. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, November, 1920, at mine as coal was being loaded into railroad cars.
439. Bituminous coal delivered to the post office and courthouse, Detroit, Mich., Treasury Department, 1915-16. Contract guaranties: 8 per cent ash, "dry coal"; 14,000 B. t. u., "as received." Price, \$2.91 per ton (2,240 pounds).
- 440-441. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, November, 1920, at mine as coal was being loaded into railroad cars.
442. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, October, 1920, at mine as coal was being loaded into railroad cars.
443. Semibituminous coal delivered to the Government fuel yards, Washington, D. C., Bureau of Mines, Department of the Interior, 1918-19. Contract guaranties: 2.5 per cent moisture, "as received"; 5 per cent ash and 14,800 B. t. u., "dry coal." Price, \$3.02 per ton (2,240 pounds) f. o. b. mines.
444. Semibituminous coal. Sample collected for the Navy Department, September, 1918, at mine as coal was being loaded into railroad cars.
- 445-446. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, November, 1920, at mine as coal was being loaded into railroad cars.
447. Semibituminous coal delivered to the Government fuel yards, Washington, D. C., Bureau of Mines, Department of the Interior, April and May, 1921. Contract guaranties: 2.07 per cent moisture, "as received"; 6.5 per cent ash and 14,541 B. t. u., "dry coal." Price, \$3.19 per ton (2,240 pounds) f. o. b. mine.
448. Semibituminous coal delivered to the Government fuel yards, Washington, D. C., Bureau of Mines, Department of the Interior, April, 1921. Contract guaranties: 2 per cent moisture, "as received"; 8.5 per cent ash and 14,350 B. t. u., "dry coal." Price, \$3.92 per ton (2,240 pounds) f. o. b. mine.
449. Bituminous coal delivered to the post-office building, Cincinnati, Ohio, Treasury Department, 1919-20. Contract guaranties: 8 per cent ash, "dry coal"; 13,800 B. t. u., "as received." Price, \$5.10 per ton (2,240 pounds).
450. Bituminous coal delivered to the Marion branch of the National Home for Disabled Volunteer Soldiers, National Military Home, Ind., 1915-16. Contract guaranties: 1.5 per cent moisture, "as received"; 8 per cent ash and 13,500 B. t. u., "dry coal." Price, \$2.25 per ton.

451. Bituminous coal delivered to the Columbus Barracks, Ohio, Quartermaster Corps, War Department, 1915-16. Contract guaranties: 2.10 per cent moisture, "as received"; 5.50 per cent ash and 14,000 B. t. u., "dry coal." Price, \$2.29 per ton.

452. Bituminous coal delivered to the Columbus Barracks, Ohio, Quartermaster Corps, War Department, 1916-17. Contract guaranties: 2.30 per cent moisture, "as received"; 5.50 per cent ash and 14,000 B. t. u., "dry coal." Price, \$2.98 per ton.

453. Bituminous coal delivered to the United States Engineers, Grand Rapids, Mich., War Department, 1919-20. Contract guaranties: 2.5 per cent moisture, "as received"; 7 per cent ash and 14,500 B. t. u., "dry coal." Price, \$5.08 per ton for delivery at St. Joseph, South Haven, Holland, Grand Haven, and Muskegon, Mich.; \$5.28 per ton for delivery at Ludington, Manister, and Frankfort, Mich.; \$5.49 per ton for delivery at Bay City, Mich.

454. Bituminous coal delivered to the Northwestern Branch of the National Home for Disabled Volunteer Soldiers, National Military Home, Wis., 1919-20. Contract guaranties: 3 per cent moisture, "as received"; 8.5 per cent ash and 13,800 B. t. u., "dry coal." Price, \$5 per ton.

455. Bituminous coal delivered to the Central Branch of the National Home for Disabled Volunteer Soldiers, National Military Home, Ohio, 1916-17. Contract guaranties: 1.5 per cent moisture, "as received"; 7 per cent ash and 14,000 B. t. u., "dry coal." Price, \$2.65 per ton.

456. Bituminous coal delivered to the Central Branch of the National Home for Disabled Volunteer Soldiers, National Military Home, Ohio, 1919-20. Contract guaranties: 2.5 per cent moisture, "as received"; 8 per cent ash and 13,600 B. t. u., "dry coal." Price, \$4.90 per ton.

457. Semibituminous coal. Sample collected for the Navy Department, December, 1917, at Lamberts Point, Va., as coal was being loaded into vessels.

458. Semibituminous coal. Sample collected for the Navy Department, February, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.

459. Semibituminous coal. Sample collected for the Navy Department, September, 1918, at mine as coal was being loaded into railroad cars.

460. Semibituminous coal. Sample collected for the Navy Department, March-May, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.

461. Semibituminous coal. Sample collected for the Navy Department, January and February, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.

462. Semibituminous coal. Sample collected for the Navy Department, February-April, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.

463. Semibituminous coal. Sample collected for the Navy Department, September, 1918, at mine as coal was being loaded into railroad cars.

464. Semibituminous coal. Samples collected for the Navy Department, February-June, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.

465. Semibituminous coal. Sample collected for the Navy Department, March-May, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.

466. Semibituminous coal. Sample collected for the Navy Department, May-June, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.

467-468. Semibituminous coal. Samples collected for the Navy Department, September, 1918, at mines as coal was being loaded into railroad cars.

469. Semibituminous coal. Samples collected for the Navy Department, June, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.

470. Semibituminous coal delivered to the United States Engineers, Wilmington, N. C., War Department, 1915-16. Contract guaranties: 2.5 per cent moisture, "as received"; 3.5 per cent ash and 15,100 B. t. u., "dry coal." Price, \$3.30 per ton for delivery at Wilmington and New Bern, N. C.; \$3.65 per ton for delivery at Morehead City, N. C.; and \$3.75 per ton for delivery at Southport, N. C.

471. Semibituminous coal. Sample collected for the Navy Department, February-April, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.
472. Semibituminous coal. Sample collected for the Navy Department, February-March, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.
473. Semibituminous coal delivered at Fort McKinley, Me., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 3 per cent moisture, "as received"; 6 per cent ash and 14,300 B. t. u., "dry coal." Price, \$5.54 per ton.
474. Semibituminous coal. Sample collected for the Navy Department, February-March, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.
475. Semibituminous coal. Sample collected for the Navy Department, January-February, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.
476. Semibituminous coal. Samples collected for the Navy Department, February-March, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.
477. Semibituminous coal. Samples collected for the Navy Department, January-February, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.
478. Semibituminous coal. Samples collected for the Navy Department, December, 1917, at Lamberts Point, Va., as coal was being loaded into vessels.
- 479-480. Semibituminous coal. Samples collected for the Navy Department, January, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.
481. Semibituminous coal. Samples collected for the Navy Department, January-February, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.
482. Semibituminous coal delivered to the United States engineer office, Norfolk, Va., War Department, 1915-16. Contract guaranties: 1.5 per cent moisture, "as received"; 5 per cent ash and 14,850 B. t. u., "dry coal." Price, \$2.50 per ton.
483. Semibituminous coal delivered to the United States engineer office, Norfolk, Va., War Department, 1916-17. Contract guaranties: 1.5 per cent moisture, "as received"; 5 per cent ash and 14,850 B. t. u., "dry coal." Price, \$2.53 per ton.
484. Semibituminous coal. Samples collected for the Navy Department, December, 1917, to January, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.
485. Semibituminous coal. Sample collected for the Navy Department, February, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.
486. Semibituminous coal. Sample collected for the Navy Department, September, 1918, at mine as coal was being loaded into railroad cars.
487. Semibituminous coal. Sample collected for the Navy Department, February, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.
488. Semibituminous coal. Sample collected for the Navy Department, December, 1917, at Lamberts Point, Va., as coal was being loaded into vessels.
489. Semibituminous coal. Sample collected for the Navy Department, February, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.
490. Semibituminous coal. Sample collected for the Navy Department, February-July, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.
491. Semibituminous coal. Samples collected for the Navy Department, January-June, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.
492. Semibituminous coal. Samples collected for the Navy Department, February-April, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.
493. Semibituminous coal. Sample collected for the Navy Department September, 1918, at mine as coal was being loaded into railroad cars.
494. Semibituminous coal. Sample collected for the Navy Department, January-February, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.
495. Semibituminous coal. Samples collected for the Navy Department, February-April, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.
496. Semibituminous coal. Samples collected for the Navy Department, March-April, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.

497. Semibituminous coal. Samples collected for the Navy Department, January-February, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.

498. Semibituminous coal. Sample collected for the Navy Department, September, 1918, at mine as coal was being loaded into railroad cars.

499. Semibituminous coal. Samples collected for the Navy Department, February-March, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.

500. Semibituminous coal. Samples collected for the Navy Department, February, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.

501. Semibituminous coal delivered to the Panama Railroad Co. at Lamberts Point, Va., October, 1915, to September, 1916. Contract guaranties: 3 per cent moisture, "as received"; 6.5 per cent ash and 14,700 B. t. u., "dry coal." Price, \$2.60 per ton (2,240 pounds) f. o. b. mines.

502. Semibituminous coal delivered to the Northwestern Branch of the National Homes for Disabled Volunteer Soldiers, National Military Home, Wis., 1915-16. Contract guaranties: 4 per cent moisture, "as received"; 6 per cent ash and 14,700 B. t. u., "dry coal." Price, \$2.95 per ton f. o. b. mine.

503. Semibituminous coal delivered to the Panama Railroad Co. at Lamberts Point, Va., October, 1916, to November, 1917. Contract guaranties: 3 per cent moisture, "as received"; 6.5 per cent ash and 14,700 B. t. u., "dry coal." Price, \$3.40 per ton (2,240 pounds).

504. Bituminous coal delivered to the District of Columbia Workhouse, Occoquan, Va., 1915-16. Contract guaranties: 3 per cent moisture, "as received"; 7.5 per cent ash and 14,000 B. t. u., "dry coal." Price, \$3.38 per ton (2,240 pounds).

505-506. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, January, 1921, at mines as coal was being loaded into railroad cars.

507. Semibituminous coal. Sample collected for the Navy Department, September, 1918, at mine as coal was being loaded into railroad cars.

508. Semibituminous coal. Samples collected for the Navy Department, April, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.

509-510. Semibituminous coal. Samples collected for the Navy Department, January, 1918, at mine as coal was being loaded into railroad cars.

511. Semibituminous coal. Samples collected for the Navy Department, March-April, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.

512. Semibituminous coal. Sample collected for the Navy Department, January, 1918, at mine as coal was being loaded into railroad cars.

513. Semibituminous coal. Sample collected for the Navy Department, February, 1918, at mine as coal was being loaded into railroad cars.

514. Semibituminous coal. Samples collected for the Navy Department, February-April, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.

515. Semibituminous coal. Samples collected for the Navy Department, May-June, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.

516. Semibituminous coal. Samples collected for the Navy Department, February, 1918, at Lamberts Point, Va., as coal was being loaded into vessels.

517. Semibituminous coal delivered to the Eastern Branch of the National Home for Disabled Volunteer Soldiers, National Military Home, Me., 1916-17. Contract guaranties: 3 per cent moisture, "as received"; 6.5 per cent ash and 14,750 B. t. u., "dry coal." Price, \$5.45 per ton (2,240 pounds).

518. Bituminous coal delivered to the eleventh lighthouse district, Detroit, Mich., Bureau of Lighthouses, Department of Commerce, 1915-16. Contract guaranties: 3 per cent moisture, "as received"; 8 per cent ash, "dry coal." Price, \$3.50 per ton, (2,240 pounds).

519. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, September, 1920, at mine as coal was being loaded into railroad cars.

520. Semibituminous coal. Sample collected for the Navy Department, March-May, 1918, at Sewalls Point, Va., as coal was being loaded into vessels.

521-522. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, December, 1920, and March, 1921, at mines as coal was being loaded into railroad cars.

523-525. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, November 17, and December 5 and 16, 1921, at sampling plant at Sewalls Point, Va.

526-527. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, May and July, 1921, at mines as coal was being loaded into railroad cars.

528. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, July, 1921, at mine as coal was being loaded into railroad cars.

529. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, September, 1920, at mine as coal was being loaded into railroad cars.

530-532. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, January 3 and 6, 1922, at sampling plant at Sewalls Point, Va.

533. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, November, 1920, at mine as coal was being loaded into railroad cars.

534. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, September, 1920, at mine as coal was being loaded into railroad cars.

535. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, November, 1920, at mine as coal was being loaded into railroad cars.

536. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, January, 1921, at mine as coal was being loaded into railroad cars.

537-538. Semibituminous coal. Samples collected for the Sewalls point Coal Exchange, September, 1920, and February, 1921, at mine as coal was being loaded into railroad cars.

539. Semibituminous coal. Sample collected for the Navy Department, March, 1918, at Sewalls Point, Va., as coal was being loaded into vessels.

540-541. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, December, 1920, and February, 1921, at mine as coal was being loaded into railroad cars.

542-543. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, November 25 and December 16, 1921, at sampling plant at Sewalls Point, Va.

544. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, October, 1920, at mine as coal was being loaded into railroad cars.

545. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, January, 1921, at mine as coal was being loaded into railroad cars.

546-547. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, November, 1920, and February, 1921, at mines as coal was being loaded into railroad cars.

548-549. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, November, 1920, and February, 1921, at mines as coal was being loaded into railroad cars.

550-551. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, December 12 and 13, 1921, at sampling plant at Sewalls Point, Va.

552. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, November, 1920, at mine as coal was being loaded into railroad cars.

553. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, December, 1920, at mine as coal was being loaded into railroad cars.

554-557. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, September 15 and October 5, 11 and 29, 1921, at sampling plant at Sewalls Point, Va.

558. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, December, 1920, at mine as coal was being loaded into railroad cars.

559-562. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, November 11 and December 19, 1921, and January 13 and 16, 1922, at sampling plant at Sewalls Point, Va.

563. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, December, 1920, at mine as coal was being loaded into railroad cars.

564-569. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, September 19 and 26, November 10, December 6, 29, 1921, and January 9, 1922, at sampling plant at Sewalls Point, Va.

570-571. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, March, 1921, at mine as coal was being loaded into railroad cars.

572-573. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, January 21 and 23, 1922, at sampling plant at Sewalls Point, Va.

574-575. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, November, 1920, and January, 1921, at mine as coal was being loaded into railroad cars.

576. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, September 14, 1921, at sampling plant at Sewalls Point, Va.

577. Semibituminous coal delivered to the Southern Branch of the National Home for Disabled Volunteer Soldiers, National Military Home, Va., 1915-16. Contract guaranties: 2.75 per cent moisture, "as received"; 5.50 per cent ash and 14,850 B. t. u., "dry coal." Price, \$2.9325 per ton (2,240 pounds).

578. Semibituminous coal delivered to the Southern Branch of the National Home for Disabled Volunteer Soldiers, National Military Home, Va., 1916-17. Contract guaranties: 2.75 per cent moisture, "as received"; 5.50 per cent ash and 14,850 B. t. u., "dry coal." Price, \$2.9325 per ton (2,240 pounds).

579-580. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, September, 1920, and January, 1921, at mines as coal was being loaded into railroad cars.

581-582. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, September, 1920, and January, 1921, at mines as coal was being loaded into railroad cars.

583. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, September 29, 1921, at sampling plant at Sewalls Point, Va.

584-585. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, December, 1920, and February, 1921, at mine as coal was being loaded into railroad cars.

586. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, September 28, 1921, at sampling plant at Sewalls Point, Va.

587. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, September, 1920, at mine as coal was being loaded into railroad cars.

588-593. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, August 29 and two on August 30, November 14, December 30, 1921, and January 16, 1922, at sampling plant at Sewalls Point, Va.

594. Semibituminous coal. Sample collected for the United States Fuel Administration, November, 1918, at mine as coal was being loaded into railroad cars.

595. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, December, 1920, at mine as coal was being loaded into railroad cars.

596-601. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, two on September 9, October 17 and 29, November 15, 1921, and January 5, 1922, at sampling plant at Sewalls Point, Va.

602. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, January, 1921, at mine as coal was being loaded into railroad cars.

603. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, October 6, 1921, at sampling plant at Sewalls Point, Va.

604. Semibituminous coal delivered to the Government fuel yards, Washington, D. C., Bureau of Mines, Department of the Interior, April, 1921. Contract guaranties: 1 per cent moisture, "as received"; 3.75 per cent ash and 14,750 B. t. u., "dry coal." Price, \$3.75 per ton (2,240 pounds) f. o. b. mine.

605-607. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, January, February, and July, 1921, at mine as coal was being loaded into railroad cars.

608-609. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, September 2, 1921, and January 10, 1922, at sampling plant at Sewalls Point, Va.

610-613. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, September, 1920, and February, March, and August, 1921, at mine as coal was being loaded into railroad cars.

614. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, November, 1920, at mine as coal was being loaded into railroad cars.

615-616. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, October, 1920, and May, 1921, at mine as coal was being loaded into railroad cars.

617. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange September, 1920, at mine as coal was being loaded into railroad cars.

618-621. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, September 2, 10, and 29, and December 31, 1921, at sampling plant at Sewalls Point, Va.

622-623. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, September, 1920, and April, 1921, at mine as coal was being loaded into railroad cars.

624-625. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, October 6, 1921, and January 17, 1922, at sampling plant at Sewalls Point, Va.

626. Semibituminous coal delivered to the Government fuel yard, Washington, D. C., Bureau of Mines, Department of the Interior, April, 1919. Contract guaranties, 2.5 per cent moisture, "as received"; 5 per cent ash and 14,800 B. t. u., "dry coal." Price, \$3.02 per ton (2,240 pounds) f. o. b. mines.

627-628. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, January, and April, 1921, at mine as coal was being loaded into railroad cars.

629. Semibituminous coal. Sample collected for the Navy Department, March, 1918, at Sewalls Point, Va., as coal was being loaded into vessels.

630. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, December, 1920, at mine as coal was being loaded into railroad cars.

631-632. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, November 17, 1921, and December 13, 1921, at sampling plant at Sewalls Point, Va.

633. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, November, 1920, at mine as coal was being loaded into railroad cars.

634-635. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange October, 1920, and March, 1921, at mine as coal was being loaded into railroad cars.

636. Semibituminous coal. Sample collected for the Navy Department, September, 1918, at mine as coal was being loaded into railroad cars.

637-638. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, September, 1920, and March, 1921, at mine as coal was being loaded into railroad cars.

639-642. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, October 1, November 2, December 3 and 12, 1921, at sampling plant at Sewalls Point, Va.

643. Semibituminous coal. Sample collected for the Navy Department, March and April, 1918, at Sewalls Point, Va., as coal was being loaded into vessels.

644. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, November, 1920, at mine as coal was being loaded into railroad cars.

645-646. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, December, 1920, and February, 1921, at mine as coal was being loaded into railroad cars.

647-652. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, two on September 30, October 28, November 16, December 9 and 13, 1921, at sampling plant at Sewalls Point, Va.

653. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, November, 1920, at mine as coal was being loaded into railroad cars.

654. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, January, 1921, at mine as coal was being loaded into railroad cars.

655-656. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, September 14 and 20, 1921, at sampling plant at Sewalls Point, Va.

657. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, September, 1920, at mine as coal was being loaded into railroad cars.

658. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, September 29, 1921, at sampling plant at Sewalls Point, Va.

659. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, January, 1921, at mine as coal was being loaded into railroad cars.

660. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, November 30, 1921, at sampling plant at Sewalls Point, Va.

661-664. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, November, 1920, at mine as coal was being loaded into railroad cars.

665-666. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, September 20 and October 20, 1921, at sampling plant at Sewalls Point, Va.

667-671. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, September, 1920, February, March, May, and October, 1921, at mine as coal was being loaded into railroad cars.

672-673. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, November, 1920, and March, 1921, at mine as coal was being loaded into railroad cars.

674. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, November, 1920, at mine as coal was being loaded into railroad cars.

675. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, November, 1920, at mine as coal was being loaded into railroad cars.

676. Semibituminous coal. Samples collected for the Navy Department, March, 1918, at Sewalls Point, Va., as coal was being loaded into vessels.

677. Semibituminous coal delivered to the second lighthouse district, Boston, Mass., Bureau of Lighthouses, Department of Commerce, 1915-16. Contract guaranties: 2.50 per cent moisture, "as received"; 6 per cent ash and 14,750 B. t. u., "dry coal." Price, \$4.23 per ton (2,240 pounds).

678. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, November 23, 1920, at mine as coal was being loaded into railroad cars.

679. Semibituminous coal delivered to the State, War, and Navy Building, Washington, D. C., 1915-16. Contract guaranties: 2.50 per cent moisture, "as received"; 6 per cent ash and 14,600 B. t. u., "dry coal." Price, \$3.54 per ton (2,240 pounds).

680. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, December 13, 1920, at mine as coal was being loaded into railroad cars.

681-682. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, November 14 and October 6, 1921, at sampling plant, Sewalls Point, Va.

683-684. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, September 27, 1920, March 24, 1921, at mine as coal was being loaded into railroad cars.

685. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, October 7, 1921, at sampling plant at Sewalls Point, Va.

686-687. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, November 29, 1920, and February 23, 1921, at mine as coal was being loaded into railroad cars.

688-690. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, two on September 10, 1921, and January 5, 1922, at sampling plant at Sewalls Point, Va.

691. Semibituminous coal. Sample collected for the Navy Department, March, 1918, at Sewalls Point, Va., as coal was being loaded into vessels.

692. Semibituminous coal delivered to the Government fuel yard, Washington, D. C., Bureau of Mines, Department of the Interior, March and April, 1919. Contract guaranties: 2.50 per cent moisture, "as received"; 5 per cent ash and 14,800 B. t. u., "dry coal." Price, \$3.02 per ton (2,240 pounds) f. o. b. mines.

693. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, November 12, 1920, at mine as coal was being loaded into railroad cars.

694. Semibituminous coal delivered to Fort Monroe, Va., Quartermaster Corps, War Department, 1916-17. Contract guaranties: 0.75 per cent moisture, "as received"; 5.5 per cent ash and 14,900 B. t. u., "dry coal." Price, \$3.13 per ton.

695. Semibituminous coal. Sample collected for the Navy Department March, 1918, at Sewalls Point, Va., as coal was being loaded into vessels.

696. Semibituminous coal. Delivered to the Government fuel yard, Washington, D. C., Bureau of Mines, Department of the Interior, 1919. Contract guaranties: 3 per cent moisture, "as received"; 5 per cent ash and 14,850 B. t. u., "dry coal." Price, \$3.024 per ton (2,240 pounds) f. o. b. mines.

697-698. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, December, 1920, and February, 1921, at mine as coal was being loaded into railroad cars.

699-700. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, September 15 and October 13, 1921, at sampling plant at Sewalls Point, Va.

701-702. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, September, 1920, and March, 1921, at mine as coal was being loaded into railroad cars.

703-704. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, November 25 and 26, 1921, at sampling plant at Sewalls Point, Va.

705-706. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, September, 1920, and August, 1921, at mine as coal was being loaded into railroad cars.

707-708. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, November 28, 1921, and January 17, 1922, at sampling plant at Sewall Point, Va.

709. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, September, 1920, at mine as coal was being loaded into railroad cars.

710-711. Semibituminous coal. Samples collected for the Sewall Point Coal Exchange, December, 1920, and February, 1921, at mine as coal was being loaded into railroad cars.

712-715. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, November 23 and 28 and December 12 and 17, 1921, at sampling plant at Sewalls Point, Va.

716. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, September, 1920, at mine as coal was being loaded into railroad cars.

717. Semibituminous coal delivered to the New National Museum, Washington, D. C., Smithsonian Institution, 1915-16. Contract guaranties: 2 per cent moisture, "as received"; 4.90 per cent ash and 14,900 B. t. u., "dry coal." Price, \$3.42 per ton (2,240 pounds).

718. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, December, 1920, at mine as coal was being loaded into railroad cars.

719. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, January, 1921, at mine as coal was being loaded into railroad cars.

720-723. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, October 1 and 31 and November 1 and 12, 1921, at sampling plant at Sewall Point, Va.

724. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, December, 1920, at mine as coal was being loaded into railroad cars.

725. Semibituminous coal delivered to the Panama Railroad Co., Sewalls Point, Va., September, 1916, to October, 1917. Contract guaranties: 3 per cent moisture, "as received"; 6.5 per cent ash and 14,700 B. t. u., "dry coal." Price, \$3.50 per ton (2,240 pounds).

726. Semibituminous coal delivered to the Government fuel yard, Washington, D. C., Bureau of Mines, Department of the Interior, 1919. Contract guaranties: 2.5 per cent moisture, "as received"; 5 per cent ash and 14,800 B. t. u., "dry coal." Price, \$3.02 per ton (2,240 pounds) f. o. b. mines.

727. Semibituminous coal delivered to the United States courthouse and post office, Baltimore, Md., Treasury Department, 1916-17. Contract guaranties: 6 to 12 per cent ash, "dry coal"; 14,400 B. t. u., "as received." Price, \$3.60 per ton (2,240 pounds).

728. Semibituminous coal delivered to the United States courthouse and post office, Baltimore, Md., Treasury Department, 1919-20. Contract guaranties: 6 per cent ash, "dry coal"; 14,000 B. t. u., "as received." Price, \$7.03 per ton (2,240 pounds).

729. Semibituminous coal delivered to the naval engineering experiment station and the naval hospital, Annapolis, Md., Navy Department, 1915-16. Contract guaranties: 3 per cent moisture, "as received"; 7.50 per cent ash and 14,400 B. t. u., "dry coal." Price, \$3.22 per ton delivered at experiment station and \$2.82 per ton delivered at hospital.

730. Semibituminous coal delivered to the fifth lighthouse district, Baltimore, Md., Bureau of Lighthouses, Department of Commerce, 1915-16. Contract guaranties: 3 per cent moisture, "as received"; 10 per cent ash and 14,000 B. t. u., "dry coal." Price, \$2.68 per ton (2,240 pounds).

731. Semibituminous coal delivered to the Government fuel yard, Washington, D. C., Bureau of Mines, Department of the Interior, 1919. Contract guaranties: 1.50 per cent moisture, "as received"; 7.5 per cent ash and 14,500 B. t. u., "dry coal." Price, \$3.25 per ton (2,240 pounds) f. o. b. mines.

732. Semibituminous coal. Sample collected for the Navy Department, March, 1918, at Sewalls Point, Va., as coal was being loaded into vessels.

733. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, December, 1920, at mine as coal was being loaded into railroad cars.

734. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, August, 1920, at mine as coal was being loaded into railroad cars.

735-737. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, November 28, December 3 and 19, 1921, at sampling plant at Sewalls Point, Va.

738-739. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, August, 1920, and January, 1921, at mine as coal was being loaded into railroad cars.

740-743. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, September, 1920, January, and May 5 and 27, 1921, at mine as coal was being loaded into railroad cars.

744-746. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, September, 1920, and May 13 and 26, 1921, at mine as coal was being loaded into railroad cars.

747. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, September, 1920, at mine as coal was being loaded into railroad cars.

748-751. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange: Two on November 15, November 22, and December 2, 1921, at sampling plant at Sewalls Point, Va.

752-756. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, August, 1920, and January, March, April, and July, 1921, at mine as coal was being loaded into railroad cars.

757-758. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, September 28 and October 10, 1921, at sampling plant at Sewalls Point, Va.

759-760. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, February and April, 1921, at mine as coal was being loaded into railroad cars.

761. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, September, 1920, at mine as coal was being loaded into railroad cars.

762-764. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, November 3 and 4, and December 19, 1921, at sampling plant at Sewalls Point, Va.

765. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, August, 1920, at mine as coal was being loaded into railroad cars.

766-767. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, October 10 and December 15, 1921, at sampling plant at Sewalls Point, Va.

768-770. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, August, 1920, and January and July, 1921, at mine as coal was being loaded into railroad cars.

771-773. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, October 17, November 2, and December 7, 1921, at sampling plant at Sewalls Point, Va.

774. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, September, 1920, at mine as coal was being loaded into railroad cars.

775. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, August, 1920, at mine as coal was being loaded into railroad cars.

776-779. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, September, 1920, and January, August, and September, 1921, at mine as coal was being loaded into railroad cars.

780. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, August, 1920, at mine as coal was being loaded into railroad cars.

781-785. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, November 25 and December 2, 1921, and two on January 4 and 11, 1922, at sampling plant at Sewalls Point, Va.

786-787. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, August, 1920, and February, 1921, at mine as coal was being loaded into railroad cars.

788-792. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, August, 1920, July, two in August and September, 1921, at mine as coal was being loaded into railroad cars.

793. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, October 28, 1921, at sampling plant at Sewalls Point, Va.

794. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, September, 1920, at mine as coal was being loaded into railroad cars.

795-798. Semibituminous coal. Samples collected for the Sewalls Point Coal Exchange, November 9, December 6, 17, and 29, 1921, at sampling plant at Sewalls Point, Va.

799. Semibituminous coal. Sample collected for the Sewalls Point Coal Exchange, October 19, 1921, at sampling plant at Sewalls Point, Va.

800. Semibituminous coal delivered to the United States navy yard, Washington, D. C., Navy Department, 1915-16. Price, \$2.90 per ton (2,240 pounds).

801. Semibituminous coal delivered to the municipal building, Washington, D. C., 1915-16. Contract guaranties: 2.5 per cent moisture, "as received"; 5 per cent ash and 14,895 B. t. u., "dry coal." Price, \$3.49 per ton (2,240 pounds).

802. Semibituminous coal delivered to the Panama Railroad Co., Sewalls Point, Va., October, 1916, to May, 1917. Contract guaranties: 3 per cent moisture, "as received"; 6.5 per cent ash and 14,700 B. t. u., "dry coal." Price, \$3.43 per ton (2,240 pounds).

803. Semibituminous coal delivered to the Panama Railroad Co., Lamberts Point, Va., September, 1915, to September, 1916. Contract guaranties: 3 per cent moisture, "as received"; 6.5 per cent ash and 14,700 B. t. u., "dry coal." Price, \$2.60 per ton for first 300,000 tons; \$2.64 per ton for remainder. (2,240 pounds to the ton.)

804. Semibituminous coal delivered to the Panama Railroad Co., Lamberts Point, Va., October, 1916, to October, 1917. Contract guaranties: 3 per cent moisture, "as received"; 6.5 per cent ash and 14,700 B. t. u., "dry coal." Price, \$3.48 per ton (2,240 pounds).

805. Semibituminous coal delivered to the Panama Railroad Co., Lamberts Point, Va., October, 1916, to November, 1917. Contract guaranties: 3 per cent moisture "as received"; 6.5 per cent ash and 14,700 B. t. u., "dry coal." Price, \$3.50 per ton (2,240 pounds).

WYOMING COALS.

806. Subbituminous coal delivered to the Battle Mountain Sanitarium of the National Home for Disabled Volunteer Soldiers, Hot Springs, S. Dak., 1916-17. Contract guaranties: 23 per cent moisture, "as received"; 8 per cent ash and 11,500 B. t. u., "dry coal." Price, \$2.85 per ton.

807. Subbituminous coal delivered to the Battle Mountain Sanitarium of the National Home for Disabled Volunteer Soldiers, Hot Springs, S. Dak., 1920-21. Contract guaranties: 22.5 per cent moisture, "as received"; 8.62 per cent ash and 11,500 B. t. u., "dry coal." Price, \$5.60 per ton.

808. Subbituminous coal delivered to Fort Yellowstone, Wyo., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 9 per cent moisture, "as received"; 3 per cent ash and 13,300 B. t. u., "dry coal." Price, \$2.25 per ton, f. o. b. Kirby, Wyo.

809. Subbituminous coal delivered to the Fort Hall Indian School, Fort Hall, Idaho, Office of Indian Affairs, Department of the Interior, 1916-17. Price, \$4.50 per ton.

810. Subbituminous coal delivered to the Battle Mountain Sanitarium of the National Home for Disabled Volunteer Soldiers, Hot Springs, S. Dak., 1919-20. Contract guaranties: 23 per cent moisture, "as received"; 5 per cent ash and 12,500 B. t. u., "dry coal." Price, \$4.45 per ton.

811. Subbituminous coal delivered to Fort Meade, S. Dak., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 22.5 per cent moisture, "as received"; 5 per cent ash and 12,200 B. t. u., "dry coal." Price, \$5.15 per ton.

812. Subbituminous coal delivered to Fort Robinson, Nebr., Quartermaster Corps, War Department, 1916-17. Contract guaranties: 22 per cent moisture, "as received"; 5 per cent ash and 12,500 B. t. u., "dry coal." Price, \$4.44 per ton.

813. Subbituminous coal delivered to the Rapid City Indian School, Rapid City, S. Dak., Office of Indian Affairs, Department of the Interior, 1915-16. Contract guaranties: 22 per cent moisture, "as received"; 5 per cent ash and 12,200 B. t. u., "dry coal." Price, \$4.85 per ton.

814. Subbituminous coal delivered to the Crow Indian Agency, Mont., Office of Indian Affairs, Department of the Interior, 1916-17. Contract guaranties: 22 per cent moisture, "as received"; 5 per cent ash and 12,500 B. t. u., "dry coal." Price, \$2.75 per ton.

815. Subbituminous coal delivered to Fort Keogh, Mont., Quartermaster Corps, War Department, 1915-16. Contract guaranties: 22.5 per cent moisture, "as received"; 5 per cent ash and 12,200 B. t. u., "dry coal." Price, \$2 per ton f. o. b. Carneyville.

816. Subbituminous coal delivered to the Rapid City Indian School, Rapid City, S. Dak., Office of Indian Affairs, Department of the Interior, 1916-17. Contract guaranties: 22 per cent moisture "as received"; 5 per cent ash and 12,400 B. t. u., "dry coal." Price, \$4.75 per ton.

817. Subbituminous coal delivered to the Battle Mountain Sanitarium of the National Home for Disabled Volunteer Soldiers, Hot Springs, S. Dak., 1915-16. Contract guaranties: 23 per cent moisture, "as received"; 8 per cent ash and 11,500 B. t. u., "dry coal." Price, \$3.40 per ton.

818. Subbituminous coal delivered to Fort Keogh, Mont., Quartermaster Corps, War Department, 1916-17. Contract guaranties: 22 per cent moisture, "as received"; 5 per cent ash and 12,200 B. t. u., "dry coal." Price, \$1.85 per ton f. o. b. Monarch.

819. Subbituminous coal delivered to Fort Keogh, Mont., Quartermaster Corps, War Department, 1919-20. Contract guaranties: 20.39 per cent moisture, "as received"; 3.52 per cent ash and 12,480 B. t. u., "dry coal." Price, \$3.25 per ton f. o. b. mines.

820. Subbituminous coal delivered to the Crow Indian Agency, Mont., Office of Indian Affairs, Department of the Interior, 1920-21. Contract guaranties: 23 per cent moisture, "as received"; 6.60 per cent ash and 11,700 B. t. u., "dry coal." Price, \$4.15 per ton during July and August, \$4.40 per ton September to March, and \$3.90 per ton April to June.

821. Subbituminous coal delivered to the Crow Indian Agency, Mont., Office of Indian Affairs, Department of the Interior, 1920-21. Contract guaranties: 23 per cent moisture, "as received"; 6.6 per cent ash and 11,500 B. t. u., "dry coal." Price, \$3.75 per ton July to March and \$3.50 per ton April to June.

822. Subbituminous coal delivered to the Crow Indian Agency, Mont., Office of Indian Affairs, Department of the Interior, 1920-21. Contract guaranties: 23 per cent moisture, "as received"; 8.5 per cent ash and 11,000 B. t. u., "dry coal." Price, \$3.45 per ton July 1 to March 31; \$3.20 per ton April 1 to June 30.

823. Bituminous coal delivered to the Fort Lapwai Indian Sanitarium, Lapwai, Idaho, Office of Indian Affairs, Department of the Interior, 1920-21. Contract guaranties: 10 per cent moisture, "as received"; 6 per cent ash and 13,250 B. t. u., "dry coal." Price, \$4 per ton f. o. b. mines.

824. Bituminous coal delivered to the Vancouver Barracks, Wash., Quartermaster Corps, War Department, 1919-20. Contract guaranties: 6.75 per cent moisture, "as received"; 3.49 per cent ash and 13,300 B. t. u., "dry coal." Price, \$3 per ton f. o. b. mines.

825. Bituminous coal delivered to the Vancouver Barracks, Wash., Quartermaster Corps, War Department, 1920-21. Contract guaranties: 9 per cent moisture, "as received"; 6 per cent ash and 13,250 B. t. u., "dry coal." Price, \$3.42 per ton. f. o. b. mines.

TIDEWATER POOL CLASSIFICATIONS.

HISTORICAL REVIEW.

In connection with its work of sampling coal for shipment to the Panama Canal, and of sampling coal for shipment to certain foreign Governments at the request of these Governments, the Bureau of Mines has collected and analyzed a large number of samples of coal shipped through the various tidewater coal exchanges. With the exception of the Newport News Coal Exchange (Inc.) these exchanges are no longer in operation (1922), but it is still common practice, and probably will be for some time, to quote prices and ship coal according to the classifications or pools of these former exchanges. It is believed, therefore, that the presentation of a brief historical review, together with the data collected by the Bureau of Mines, will be of considerable value to consumers of coal.

The Tidewater Coal Exchange, operating at the ports of New York, Philadelphia, Baltimore, and Hampton Roads, was established as a voluntary organization June 20, 1917, and continued in operation until April 30, 1920. The rulings of the exchange were recognized by the United States Fuel Administration and the United States Railroad Administration and under orders of these Government organizations the pooling of coal was made compulsory from November, 1917, to February, 1919, and again from February, 1920, to April, 1920.

On May 1, 1920, the Tidewater Coal Exchange (Inc.), succeeded the old Tidewater Coal Exchange but operated only at the ports of New York, Philadelphia, and Baltimore. This exchange handled shipments over the Baltimore & Ohio, the Buffalo, Rochester, & Pittsburgh, the New York Central, the Pennsylvania, the Pittsburgh & Lake Erie, and the Western Maryland Railroads and connections. At Hampton Roads three separate exchanges were established, the Lamberts Point Coal Exchange handling shipments over the Norfolk & Western Railway and connections, the Newport News Coal Exchange (Inc.) handling shipments over the Chesapeake & Ohio Railway and connections, and the Sewalls Point Coal Exchange (Inc.), handling shipments over the Virginian Railway and connections. All of these exchanges were voluntary organizations. The Tidewater Coal Exchange (Inc.) ceased operations in September, 1921; the Lamberts Point Coal Exchange February, 1922; and the Sewalls Point Coal Exchange (Inc.), March, 1922. The Newport News Coal Exchange (Inc.) was still functioning in February, 1923.

The primary object of the coal exchanges was to expedite movement of coal through tidewater ports by the quick release of railroad cars and rapid dispatch of vessels, thereby avoiding demurrage charges on both cars and vessels and at the same time permitting the movement of a larger tonnage of coal. This was accomplished by grouping mines producing similar coals into classes or pools. An individual shipper, instead of holding coal in the cars until enough had been accumulated to load a vessel, was credited with shipment to the pools when the coal left the mines and was permitted to load vessels up to the limit of his credit in the exchange, the withdrawals being later replaced by the arrival of new coal from the mines.

The original classifications or pools were made by groups of operators, coal agents, and others interested, meeting in conferences and making the classifications according to their best judgment. Very soon coals from more than 3,000 mines were put in classes, each of which was called a pool and given a number. No analytical limits were published for the various pools, which were designated simply by number and descriptive terms. Classification lists were published showing the description of the various pools and the consigning pool number of each mine. Supplementary and revised lists were issued from time to time during the life of the old Tidewater Exchange, but no radical changes were made in the original classification.

An inspection force was maintained at each of the loading piers. The duties of the inspectors were both to see that the coal from each mine was consigned to the proper pool and to reject coal that on visual inspection showed an excessive amount of impurities for the particular pool to which it was assigned. A small field force also was maintained to inspect mines and the methods of preparation there.

When the new exchanges were established in May, 1920, the classifications of the old exchange were adopted by all the new ones except the Sewalls Point Coal Exchange (Inc.). The classifications were revised and a number of new pools added. Some sampling was done. The officials in charge of the classifications probably had some analytical limits for the various pools, but neither the analyses of samples nor the analytical limits of the pools were published. The old system of inspection also was continued.

The Sewalls Point Coal Exchange (Inc.) made a radical departure from the old system and established a classification based on analyses of representative samples. A cooperative agreement was made with the Bureau of Mines, whereby this bureau performed the technical work of sampling and analysis. The sampling on which the classification was based consisted of three parts, as follows:

First: Face samples taken in each mine for the purpose of making a scientific study of the coal beds.

Second: A tipple sample, covering a full day's output at each mine, collected as coal was being loaded into railroad cars. This sample indicated the commercial output of the mines.

Third: A mechanical sampling plant was erected at Sewalls Point, Va. At this plant samples were collected from each mine as frequently as operating conditions permitted, so serving as a continuous check on the quality of the coal produced at each mine.

Analytical limits were fixed for each pool and were published. As a result of the test of tipple samples, together with the data on preparation and mining, each mine was assigned to its proper pool. The results of sampling at the Sewalls Point sampling plant determined whether a mine stayed in the pool to which it was originally assigned.

Table 1 of this bulletin gives the results of analyses of tipple and plant samples. These records, together with the reports on mine samples, perhaps constitute the most complete record ever obtained from any one coal district. The descriptions and specifications of the four exchanges appear on pages 96 to 98. As noted above, these descriptions or classifications were frequently changed and those given herein are taken from the latest publication of the various exchanges.

TABULAR DATA.

In Table 2 are presented results of the analyses of samples of pooled coal. All samples were collected by samplers of the Bureau of Mines according to the standard method of the bureau. For convenient handling and for obtaining a closer check on the uniformity of the pools, samples were prepared in 500-pound units instead of the regular 1,000-pound, as required by the bureau's standard method, consequently each analysis represents a 500-pound sample. In reporting results to the consignee the average analysis of all samples of each pool was given. Because of this difference individual analyses showed greater variations than they would have shown if the regular 1,000-pound samples had been collected.

Analyses are grouped according to the loading piers at which samples were collected. Thus the name of the pier indicates the railroad over which the coal was shipped and also the mining district from which the coal came.

The reader should bear in mind that the greater the number of analyses the more nearly the average value and range of variation for each pool becomes known. For some pools only a few analyses are given; these do not show the true value of the coal in the pools, but only indicate their general character.

CLASSIFICATIONS USED BY POOLS.

Below are given the terms used by the various exchanges and pools in classifying the coal they handled.

TIDEWATER COAL EXCHANGE (INC.).

Description of pools.

Description.	Size.	Pool No.
American standard low-volatile (mines on Navy acceptable list).	R. o. m.	1
Superior low-volatile (N. Y. C., P. & S., C. & I.).....	R. o. m.	4
Superior low-volatile, all other roads.....	R. o. m.	9
High-grade low-volatile, all roads.....	R. o. m.	10
Low-volatile, all roads.....	R. o. m.	11
Superior medium-volatile, all roads.....	R. o. m.	12
Medium-volatile, all roads.....	R. o. m.	14
Other medium-volatile coal, all roads.....	R. o. m.	15
Other low-volatile coal, all roads.....	R. o. m.	18
Slack coal from low-volatile mines (in pools 1-4-9-10-11).....	Slack.	20
High-volatile by-product coal from mines on P. R. R.....	R. o. m.	21
Low-sulphur gas coal (Pittsburgh district).....	$\frac{3}{4}$ -inch lump.	30
Low-sulphur gas coal (Pittsburgh district).....	R. o. m.	31
Slack coal from Pools 31-61.....	Slack.	32
High-volatile steam coal (Fairmont and Pittsburgh districts)...	$\frac{3}{4}$ -inch lump.	33
High-volatile steam coal (Fairmont and Pittsburgh districts)...	R. o. m.	34
Slack coal from pools 34-38-44-54-64.....	Slack	35
Fairmont, low-sulphur gas coal.....	$\frac{3}{4}$ -inch lump.	37
Fairmont, low-sulphur gas coal.....	R. o. m.	38
Greensburg, high-volatile.....	$\frac{3}{4}$ -inch lump.	39
Greensburg, high-volatile.....	R. o. m.	40
High-volatile steam coal (all seams).....	$\frac{3}{4}$ -inch lump.	43
High-volatile steam coal (all seams).....	R. o. m.	44
Superior high-volatile coal (Sewickley, Kittanning, Waines- burg and Freeport seams).	$\frac{3}{4}$ -inch lump.	53
Superior high-volatile coal (Sewickley, Kittanning, Waines- burg and Freeport seams).	R. o. m.	54
Westmoreland Irwin Basin and Youghiogheny low-sulphur illuminating-gas coal.	$\frac{3}{4}$ -inch lump.	60
Westmoreland Irwin Basin and Youghiogheny low-sulphur illuminating-gas coal.	R. o. m.	61
Pittsburgh and Redstone seams, hard-structure gas coal.....	$\frac{3}{4}$ -inch lump.	63
Pittsburgh and Redstone seams, hard-structure gas coal.....	R. o. m.	64
Mines on Navy supplementary list.....	R. o. m.	71

NEWPORT NEWS COAL EXCHANGE (INC.).

Description of classifications.

Description.	Size.	Pool No.
"Standard" New River low-volatile.....	R. o. m.	1
Other high-grade New River low-volatile.....	R. o. m.	2
Standard and other high-grade New River low-volatile.....	Lump and egg.	44
Standard and other high-grade New River low-volatile.....	Nut and slack.	3
Medium-grade New River low-volatile.....	R. o. m.	42
Meadow River and other low-volatile coals.....	R. o. m.	12

NOTE.—Analysis of this coal will compare favorably with Pools Nos. 1 and 2, but averages a much higher percentage of slack and fines.

Description.	Size.	Pool No.
"Standard" high-volatile gas.....	R. o. m.	15
"Standard" high-volatile gas and by-product.....	Lump and egg.	45
"Standard" high-volatile gas and by-product.....	Nut and slack.	37
High-volatile gas.....	R. o. m.	5
High-volatile gas.....	Lump and egg	43
High-volatile gas.....	Nut and slack	32
"Standard" high-volatile by-product.....	R. o. m.	7
"Standard" high-volatile "firm-structure splint".....	R. o. m.	16
"Standard" high-volatile "firm-structure splint".....	Lump and egg	46
"Standard" high-volatile "firm-structure splint".....	Nut and slack.	36
High-volatile splint.....	R. o. m.	6
High-volatile splint.....	Lump and egg.	41
High-volatile splint.....	Nut and slack.	35
Medium-grade high-volatile coals.....	R. o. m.	56

LAMBERTS POINT COAL EXCHANGE.

Description of classifications.

Description.	Size.	Pool No.
American standard low-volatile (mines on Navy acceptable list).R. o. m.		1
Other high-grade Pocahontas-Flat Top and Tug River low volatile.....	R. o. m.	2
Low-volatile slack.....	Slack.	3
Medium-grade Pocahontas-Flat Top and Tug River low-volatile.R. o. m.		4
High-volatile gas.....	R. o. m.	5
High-volatile steam.....	R. o. m.	6
High-volatile by-product.....	R. o. m.	7
High-volatile gas slack.....	Slack.	32
High-volatile steam slack.....	Slack.	35
Taggart Seam.....	R. o. m.	40
High-volatile steam lump.....	Lump.	41
High-volatile gas lump.....	Lump.	43
Pocahontas-Flat Top and Tug River low-volatile lump.....	Lump.	44
High-volatile steam egg.....	Egg.	51
High-volatile gas egg.....	Egg.	53
Pocahontas-Flat Top and Tug River egg.....	Egg.	54
Medium-grade High-volatile steam.....	R. o. m.	56
High-volatile steam nut.....	Nut.	61
High-volatile gas nut.....	Nut.	63
Pocahontas-Flat Top and Tug River nut.....	Nut.	64
Pocahontas-Flat Top and Tug River pea.....	Pea.	84

NOTE.—All mines shown herein under Pools 41, 43, and 44, for *lump*-size coal must ship their *egg*-size coal to Pools 51, 53, and 54, and their *nut*-size coal to Pools 61, 63, and 64, respectively; and Pool No. 44 mines must ship their *pea*-size coal to Pool 84, as Pools 41, 43, and 44 are reserved exclusively for *lump*-size coal and no smaller sizes of coal will be accepted in these pools.

SEWALLS POINT COAL EXCHANGE (INC.).

Sewalls Point standard pools.

Description.	Pool No.	Size.	Specification.
Sewalls Point standard low-volatile.....	1	R. o. m....	1
Sewalls Point standard low-volatile.....	2	R. o. m....	2
Sewalls Point standard low-volatile.....	4	R. o. m....	4
Low-volatile slack.....	3	Slack.....	None.
Sewalls Point standard medium-volatile.....	8	R. o. m....	8

Specification 1. Low-volatile run-of-mine coal from mines which on the average of all tests of the Sewalls Point Coal Exchange for a given mine shows more than 15,500 B. t. u. per pound of moisture⁵ and ash-free coal and which maintains a standard of ash in the dry-coal analysis of not more than 7.50 per cent of ash as determined by test of the exchange. Coal with respect to size, coarseness and preparation thereof shall not be detrimental to the pool.

Specification 2. Low-volatile run-of-mine coal from mines which on the average of all tests of the Sewalls Point Coal Exchange for a given mine shows more than 15,500 B. t. u. per pound of moisture⁵ and ash-free coal and which maintains a standard of ash in the dry-coal analysis of not more than 8.50 per cent of ash as determined by test of the exchange. Coal with respect to size, coarseness and preparation thereof shall not be detrimental to the pool.

Specification 4. Low-volatile run-of-mine coal from mines which on the average of all tests of the Sewalls Point Coal Exchange for a given mine shows more than 15,500 B. t. u. per pound of moisture⁵ and ash-free coal and which maintains a standard of ash in the dry coal analysis of more than 8.50 per cent of ash but not more than 12.50 per cent of ash as determined by test of the exchange. Coal with respect to size, coarseness and preparation thereof shall not be detrimental to the pool.

Specification 8. Medium-volatile run-of-mine coal from mines which on the average of all tests of the Sewalls Point Coal Exchange for a given mine shows not less than 15,400 B. t. u. per pound nor more than 32.50 per cent volatile both on the moisture⁵ and ash-free basis and which maintains a standard of ash in the dry-coal analysis of not more than 8.50 per cent of ash as determined by test of the exchange. Coal with respect to size, coarseness and preparation thereof shall not be detrimental to the pool.

All other coal which does not meet the specifications of the pools as enumerated and set out above must be shipped as unclassified coal.

Standard analysis.

Pool.	Moisture, per cent.	Dry coal.				
		Volatile matter, per cent.	Fixed carbon, per cent.	Sulphur, per cent.	Ash, per cent.	B. t. u.
1	2.50	18.50	75.50	0.75	6.00	14,700
2		17.50	74.50	.75	8.00	14,400
4		17.00	73.00	.75	10.00	14,100
8		28.75	63.25	.90	8.00	14,300

⁵ Volatile matter and calorific value are stated in the specifications on the moisture and ash free basis, as these are nearly constant in a given coal while they vary in the dry or actual analysis according to the percentage of ash and moisture. Moisture and ash free coal is calculated from the dry-coal analysis as follows: Subtract the amount of ash from 100 per cent and divide the remainder into the percentage of volatile, fixed carbon, and B. t. u.'s stated in the dry-coal analysis. The result on each item shows the amount in moisture and ash-free coal.

TABLE 2.—Analyses of pool coal, Atlantic shipping ports.
POOL NO. 1, RUN-OF-MINE COAL.

Consignees.	Port of loading.	Pier.	Date.	Tons delivered.	Proximate analyses.					Calorific value, per pound.					
					As received.		Dry coal.			As received.		Dry coal.		Moisture-free and ash-free.	
					Mois- ture, per cent.	Volat- ile mat- ter, per cent.	Fixed car- bon, per cent.	Ash, per cent.	Sul- phur, per cent.	B. t. u.	Calo- ries.	B. t. u.	Calo- ries.	B. t. u.	Calo- ries.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Panama Canal.....	Norfolk, Va.....	Lamberts Point.....	Nov. 14, 1917.....	1,001	2.80	18.80	74.40	6.80	0.60	14,300	7,944	14,720	8,178	15,790	8,772
Do.....	do.....	do.....	do.....	1,001	2.70	18.40	74.80	6.80	.55	14,270	7,928	14,670	8,150	15,740	8,744
Do.....	do.....	do.....	do.....	1,001	2.50	18.00	74.90	7.10	.55	14,260	7,922	14,620	8,122	15,730	8,739
Do.....	do.....	do.....	Nov. 17, 1917.....	1,900	2.60	18.50	74.20	7.30	.65	14,180	7,878	14,560	8,089	15,710	8,728
Do.....	do.....	do.....	do.....	1,900	2.60	18.20	74.50	7.30	.60	14,180	7,878	14,560	8,089	15,710	8,728
Do.....	do.....	do.....	do.....	1,900	2.00	17.00	75.80	7.20	.55	14,310	7,920	14,600	8,111	15,740	8,744
Do.....	do.....	do.....	do.....	1,900	2.70	18.60	76.10	5.30	.50	14,530	8,072	14,930	8,294	15,760	8,756
Do.....	do.....	do.....	do.....	1,900	2.40	19.50	74.10	6.40	.55	14,470	8,039	14,870	8,233	15,780	8,763
Do.....	do.....	do.....	do.....	564	2.40	19.50	74.30	6.80	.55	14,360	7,978	14,730	8,178	15,720	8,733
Do.....	do.....	do.....	do.....	564	2.00	17.90	74.30	7.80	.50	14,230	7,906	14,520	8,067	15,750	8,722
Do.....	do.....	do.....	Jan. 24, 1918.....	1,906	3.90	17.30	74.50	8.20	.55	13,860	7,700	14,410	8,006	15,700	8,737
Do.....	do.....	do.....	do.....	1,906	3.10	17.10	76.30	6.60	.50	14,230	7,906	14,680	8,156	15,720	8,737
Do.....	do.....	do.....	do.....	1,906	3.40	17.70	75.30	7.00	.45	14,140	7,856	14,640	8,133	15,750	8,750
Do.....	do.....	do.....	do.....	1,906	3.80	17.40	74.70	7.90	.45	13,900	7,722	14,450	8,028	15,690	8,711
Do.....	do.....	do.....	do.....	1,906	3.90	17.90	73.80	8.30	.50	13,810	7,672	14,380	7,989	15,680	8,711
Do.....	do.....	do.....	do.....	1,906	2.40	16.80	74.30	7.90	.60	14,130	7,850	14,480	8,044	15,720	8,733
Do.....	do.....	do.....	do.....	1,906	2.70	16.80	75.20	8.00	.55	14,040	7,800	14,430	8,017	15,680	8,711
Do.....	do.....	do.....	do.....	967	2.90	19.00	74.10	6.90	.50	14,210	7,894	14,630	8,128	15,730	8,733
Do.....	do.....	do.....	Apr. 7, 1918.....	967	2.90	17.80	74.70	7.50	.60	14,110	7,838	14,540	8,078	15,720	8,733
Do.....	do.....	do.....	do.....	967	2.80	18.80	73.20	8.00	.55	14,010	7,783	14,490	8,011	15,670	8,706
Do.....	do.....	do.....	do.....	967	3.20	21.00	73.50	8.00	.50	13,920	7,733	14,400	8,072	15,700	8,706
Do.....	do.....	do.....	do.....	1,525	3.40	18.10	73.10	7.40	.60	13,790	7,641	14,280	7,972	15,670	8,698
Do.....	do.....	do.....	Apr. 15, 1918.....	1,525	3.00	19.00	73.60	8.80	.65	14,070	7,817	14,510	8,061	15,650	8,698
Do.....	do.....	do.....	do.....	1,525	3.10	20.30	71.10	8.60	.65	13,840	7,682	14,280	7,933	15,700	8,698
Do.....	do.....	do.....	do.....	1,525	3.10	20.40	72.40	7.20	.60	13,840	7,682	14,280	7,933	15,700	8,698
Do.....	do.....	do.....	do.....	1,525	3.20	18.60	73.10	8.10	.55	13,840	7,682	14,280	7,933	15,700	8,698
Do.....	do.....	do.....	do.....	1,525	3.60	18.60	74.00	7.40	.50	13,690	7,772	14,310	8,001	15,690	8,644
Do.....	do.....	do.....	Apr. 16, 1918.....	1,123	3.60	18.60	74.00	7.40	.50	13,690	7,772	14,310	8,001	15,690	8,644
Do.....	do.....	do.....	do.....	1,123	3.30	18.30	74.70	7.00	.50	14,000	7,778	14,480	8,044	15,670	8,650

TABLE 2.—Analyses of pool coal, Atlantic shipping ports—Continued.

POOL NO. 1, RUN-OF-MINE COAL—Continued.

Consignee.	Port of loading.	Pier.	Date.	Tons delivered.	Proximate analyses.										Calorific value, per pound.					
					As received.				Dry coal.			As received.			Dry coal.		Moisture-free and ash-free.			
					As received.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	7	8	9	10	B. t. u.	Calo-ries.	B. t. u.	Calo-ries.	B. t. u.	Calo-ries.	B. t. u.	Calo-ries.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16					
Panama Canal.....	Norfolk, Va.....	Lamberts Point.....	April 16, 1918.....	1,123	3.30	17.70	74.90	7.40	0.60	13,970	7,761	14,440	8,022	15,600	8,667					
Do.....	do.....	do.....	do.....	1,247	2.70	18.00	74.70	7.30	.55	14,100	7,833	14,480	8,044	15,620	8,678					
Do.....	do.....	do.....	do.....	1,247	3.50	18.90	74.00	7.10	.55	14,020	7,789	14,520	8,067	15,630	8,683					
Do.....	do.....	do.....	do.....	1,247	3.50	18.60	74.00	7.40	.55	13,960	7,783	14,470	8,044	15,620	8,678					
Do.....	do.....	do.....	do.....	1,247	3.20	17.40	75.20	7.40	.55	14,010	7,783	14,480	8,044	15,620	8,689					
Do.....	do.....	do.....	do.....	1,733	3.20	17.60	74.40	8.00	.60	13,880	7,711	14,330	7,961	15,570	8,659					
Do.....	do.....	do.....	Apr. 22, 1918.....	1,733	3.10	17.70	74.60	7.70	.50	13,990	7,772	14,440	8,022	15,640	8,689					
Do.....	do.....	do.....	do.....	1,733	3.30	17.50	74.80	7.70	.50	13,890	7,717	14,460	8,033	15,670	8,706					
Do.....	do.....	do.....	do.....	1,733	3.30	18.00	75.60	6.40	.55	14,140	7,856	14,600	8,122	15,620	8,678					
Do.....	do.....	do.....	do.....	1,495	3.30	18.70	74.50	6.40	.55	14,210	7,894	14,600	8,151	15,600	8,717					
Do.....	do.....	do.....	Apr. 26, 1918.....	1,495	4.10	17.00	74.00	6.30	.55	13,680	7,822	14,680	8,156	15,580	8,700					
Do.....	do.....	do.....	do.....	1,495	3.20	17.90	74.50	7.60	.55	13,800	7,687	14,400	8,000	15,580	8,656					
Do.....	do.....	do.....	do.....	1,495	3.20	17.00	75.40	6.60	.55	13,960	7,597	14,620	8,122	15,650	8,656					
Do.....	do.....	do.....	do.....	1,495	4.10	17.30	73.60	7.30	.50	13,960	7,596	14,760	8,089	15,680	8,711					
Do.....	do.....	do.....	May 6, 1918.....	1,116	3.20	18.80	73.30	8.90	.45	14,310	7,890	14,780	8,089	15,710	8,728					
Do.....	do.....	do.....	do.....	1,116	2.80	17.50	73.70	8.40	.45	13,780	7,696	14,580	7,878	15,500	8,644					
Do.....	do.....	do.....	do.....	1,116	2.80	17.90	73.70	8.40	.45	13,850	7,696	14,230	7,906	15,500	8,644					
Do.....	do.....	do.....	do.....	1,116	2.40	17.80	74.90	7.30	.40	14,070	7,817	14,410	8,006	15,540	8,644					
Do.....	do.....	do.....	do.....	924	3.20	17.20	74.40	8.40	.60	13,970	7,761	14,440	8,022	15,760	8,796					
Do.....	do.....	do.....	May 13, 1918.....	924	2.90	17.80	72.40	8.40	.45	13,740	7,633	14,140	7,856	15,680	8,711					
Do.....	do.....	do.....	do.....	924	3.90	17.60	73.80	6.60	.50	14,040	7,630	14,610	8,117	15,640	8,689					
Do.....	do.....	do.....	do.....	1,222	3.60	17.20	69.90	12.90	.45	13,130	7,294	13,620	7,567	15,630	8,683					
Do.....	do.....	do.....	June 29, 1918.....	1,222	3.70	17.30	72.00	10.70	.45	13,380	7,439	13,910	7,728	15,570	8,650					
Do.....	do.....	do.....	do.....	1,222	3.90	17.20	73.10	9.70	.50	13,510	7,506	14,050	7,806	15,560	8,644					
Do.....	do.....	do.....	do.....	1,222	3.40	18.10	74.40	7.50	.50	14,020	7,789	14,510	8,061	15,960	8,711					
				72,982	3.14	18.15	74.29	7.56	.51	14,029	7,794	14,484	8,047	15,969	8,705					
				Average for above 53 analyses, Pool No. 1, Lamberts Point, fiscal year 1918....																

ANALYSES OF POOL COAL, ATLANTIC SHIPPING PORTS. 101

Table with columns: Panama Canal, Norfolk, Va., Lamberts Point, Date, and 10 numerical columns representing coal analysis data. The table lists various samples and their corresponding values across the columns.

TABLE 2.—Analyses of pool coal, Atlantic shipping ports—Continued.

POOL NO. 1, RUN-OF-MINE-COAL—Continued.

Consignee.	Port of loading.	Pier.	Date.	Tons delivered.	Proximate analyses.										Caloric value, per pound.			
					As received.	Dry coal.			As received.			Dry coal.		Moisture-free and ash-free.				
						Mois- ture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sul- phur, per cent.	B. t. u.	Calo- ries.	B. t. u.	Calo- ries.	B. t. u.	Calo- ries.		
6	7	8	9	10	11	12	13	14	15	16								
Panama Canal	Norfolk, Va.	8	Sept. 11, 1818	1,169	2.30	18.40	73.70	7.90	0.50	14,170	7,872	14,500	8,056	15,740	8,744			
Do.	do.	do.	do.	1,169	2.80	17.70	75.00	7.30	0.60	14,220	7,900	14,630	8,128	15,780	8,767			
Do.	do.	do.	do.	1,169	2.80	18.00	74.30	7.70	.55	14,140	7,856	14,560	8,089	15,770	8,761			
Do.	do.	do.	Sept. 23, 1918	883	2.40	18.10	74.60	7.30	.45	14,230	7,906	14,590	8,106	15,740	8,744			
Do.	do.	do.	do.	883	2.70	18.10	75.20	6.70	.45	14,290	7,922	14,650	8,139	15,700	8,722			
Do.	do.	do.	do.	883	2.00	18.50	73.60	6.90	.45	14,360	7,978	14,650	8,139	15,740	8,744			
Do.	do.	do.	do.	962	2.50	19.10	73.60	7.30	.45	14,230	7,906	14,600	8,111	15,750	8,750			
Do.	do.	do.	do.	962	2.80	17.80	73.90	7.40	.50	14,120	7,844	14,560	8,067	15,680	8,711			
Do.	do.	do.	do.	962	2.40	19.90	72.50	7.10	.55	14,230	7,906	14,530	8,100	15,780	8,767			
Do.	do.	do.	Oct. 21, 1918	843	2.50	17.70	73.20	7.60	.45	14,110	7,839	14,470	8,039	15,660	8,700			
Do.	do.	do.	do.	843	2.50	17.50	76.50	6.30	.45	14,380	7,989	14,740	8,189	15,730	8,739			
Do.	do.	do.	do.	843	2.50	17.20	74.90	6.50	.45	14,280	7,953	14,710	8,172	15,730	8,739			
Do.	do.	do.	do.	843	2.90	19.00	74.50	6.50	.60	14,210	7,894	14,640	8,153	15,650	8,695			
Do.	do.	do.	Jan. 20, 1919	1,665	2.90	18.60	73.80	7.00	.60	14,120	7,844	14,580	8,100	15,680	8,711			
Do.	do.	do.	do.	1,665	3.20	19.20	73.90	6.50	.55	14,020	7,789	14,510	8,061	15,730	8,728			
Do.	do.	do.	do.	1,665	3.00	19.10	74.10	7.80	.55	14,220	7,900	14,660	8,144	15,710	8,728			
Do.	do.	do.	do.	1,665	3.00	18.40	74.90	6.70	.55	14,170	7,872	14,620	8,122	15,680	8,711			
Do.	do.	do.	do.	1,665	3.20	18.30	74.60	7.10	.50	14,130	7,850	14,600	8,111	15,710	8,728			
Do.	do.	do.	do.	1,665	3.20	18.90	73.10	8.00	.45	14,010	7,782	14,470	8,039	15,730	8,739			
Do.	do.	do.	do.	1,665	2.70	17.30	74.50	8.20	.50	13,990	7,753	14,370	7,983	15,650	8,695			
Do.	do.	do.	Feb. 19, 1919	2,002	2.20	18.20	74.20	7.60	.60	14,190	7,853	14,600	8,056	15,690	8,717			
Do.	do.	do.	do.	2,002	2.60	21.00	71.90	7.10	.55	14,240	7,911	14,620	8,122	15,740	8,744			
Do.	do.	do.	do.	2,002	2.50	18.20	73.30	8.50	.55	14,050	7,806	14,410	8,006	15,750	8,750			
Do.	do.	do.	do.	2,002	2.90	17.90	74.10	8.00	.55	14,040	7,800	14,450	8,028	15,700	8,722			
Do.	do.	do.	do.	2,002	2.30	18.40	73.70	7.90	.55	14,120	7,844	14,460	8,033	15,700	8,722			
Do.	do.	do.	do.	2,002	2.10	18.00	75.20	6.80	.50	14,350	7,972	14,650	8,139	15,720	8,733			
Do.	do.	do.	do.	2,004	3.50	19.20	74.10	6.70	.55	14,140	7,856	14,650	8,139	15,700	8,728			
Do.	do.	do.	do.	2,004	2.90	18.70	73.70	7.60	.55	14,090	7,828	14,510	8,061	15,710	8,728			

TABLE 2.—Analyses of pool coal, Atlantic shipping ports—Continued.
POOL NO. 1, RUN-OF-MINE COAL—Continued.

Consignee.	Port of loading.	Pier.	Date.	Tons deliv-ered.	Proximate analyses.										Calorific value, per pound.					
					As re-ceived.				Dry coal.			As re-ceived.			Dry coal.		Moisture-free and ash-free.			
					Mois-ture, per cent.	Volat-ile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sul-phur, per cent.	8	9	10	B. t. u.	Calo-ries.	B. t. u.	Calo-ries.	B. t. u.	Calo-ries.	B. t. u.	Calo-ries.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16					
Panama Canal	Norfolk, Va.	Lamberts Point	May 19, 1919	2,012	3.20	19.10	73.40	7.50	0.55	14,050	7,906	14,520	8,067	15,700	8,772					
Do.	do.	do.	do.	2,012	3.60	17.90	74.10	8.00	.50	13,960	7,756	14,480	8,044	15,740	8,744					
Do.	do.	do.	do.	2,012	3.00	18.10	74.70	7.20	.45	14,040	7,890	14,480	8,044	15,740	8,772					
Do.	do.	do.	do.	2,012	3.40	18.70	73.70	8.20	.55	13,890	7,717	14,370	7,983	15,660	8,700					
Do.	do.	do.	do.	2,012	3.10	18.70	73.50	8.80	.50	13,850	7,772	14,440	8,022	15,660	8,700					
Do.	do.	do.	do.	2,012	4.10	17.60	74.40	8.00	.55	13,850	7,694	14,440	8,022	15,700	8,722					
Do.	do.	do.	do.	2,019	3.20	18.20	74.10	7.70	.60	14,270	7,872	14,640	8,135	15,860	8,811					
Do.	do.	do.	do.	2,019	2.70	18.40	74.70	6.90	.60	14,280	7,953	14,670	8,130	15,760	8,756					
Do.	do.	do.	do.	2,019	2.70	18.40	74.70	6.90	.60	14,090	8,225	14,480	8,044	15,670	8,706					
Do.	do.	do.	do.	2,019	2.60	18.20	75.10	6.70	.60	14,230	7,917	14,630	8,128	15,680	8,711					
Do.	do.	do.	do.	2,019	3.40	18.50	74.90	6.60	.55	14,090	7,828	14,580	8,106	15,630	8,683					
Do.	do.	do.	do.	2,019	3.00	19.30	71.30	6.10	.60	14,270	7,928	14,720	8,178	15,680	8,711					
Do.	do.	do.	do.	1,807	2.70	17.70	73.00	11.00	.60	13,550	7,528	13,930	7,739	15,650	8,695					
Do.	do.	do.	do.	1,807	2.70	18.40	73.00	8.60	.50	13,990	7,772	14,380	7,989	15,740	8,744					
Do.	do.	do.	do.	1,807	2.70	17.90	74.00	8.10	.60	14,040	7,800	14,430	8,017	15,700	8,722					
Do.	do.	do.	do.	1,807	2.60	18.20	73.90	7.90	.60	14,070	7,817	14,450	8,028	15,680	8,711					
Do.	do.	do.	do.	1,807	1.90	18.10	74.80	7.10	.60	14,270	7,928	14,550	8,063	15,670	8,706					
Average for above 150 analyses, Pool No. 1, Lamberts Point, fiscal year 1919				235,011	2.78	18.29	74.39	7.32	.53	14,160	7,867	14,565	8,092	15,715	8,731					
Panama Canal	Norfolk, Va.	Lamberts Point	Sept. 6, 1919	2,024	2.10	17.90	75.00	7.10	.60	14,340	7,967	14,650	8,139	15,770	8,761					
Do.	do.	do.	do.	2,024	2.60	17.90	74.70	6.70	.55	14,290	7,939	14,670	8,150	15,720	8,753					
Do.	do.	do.	do.	2,024	2.50	18.00	74.70	7.30	.65	14,190	7,863	14,550	8,063	15,700	8,722					
Do.	do.	do.	do.	2,024	2.30	18.00	76.10	5.90	.60	14,470	8,039	14,810	8,228	15,740	8,744					
Do.	do.	do.	do.	2,076	3.60	19.10	72.70	8.20	.60	13,880	7,683	14,350	7,972	15,630	8,683					
Do.	do.	do.	do.	2,076	2.70	17.60	75.40	7.00	.60	14,220	7,906	14,620	8,122	15,720	8,733					
Do.	do.	do.	do.	2,076	2.70	18.00	74.30	7.70	.50	14,110	7,839	14,510	8,061	15,720	8,733					
Do.	do.	do.	do.	2,076	3.10	18.30	74.10	7.60	.55	14,010	7,783	14,460	8,033	15,650	8,695					
Do.	do.	do.	do.	2,076	3.40	18.20	74.70	7.10	.55	14,050	7,806	14,540	8,078	15,660	8,700					

Do.	do.	1,927	2.70	17.90	74.40	7.70	60	14,080	7,922	14,470	8,089	15,670	8,706
Do.	do.	1,927	2.80	18.10	73.30	8.60	60	13,910	7,728	14,300	7,944	15,650	8,695
Do.	do.	1,927	2.60	19.00	72.70	9.00	65	13,920	7,750	14,320	7,956	15,610	8,695
Do.	do.	1,516	3.20	18.40	72.60	9.00	60	13,780	7,622	14,180	7,878	15,580	8,656
Do.	do.	1,516	3.00	18.80	73.00	8.50	60	13,960	7,756	14,480	8,017	15,770	8,761
Do.	do.	2,033	3.00	18.80	74.00	7.20	55	14,030	7,794	14,460	8,033	15,560	8,661
Do.	do.	2,033	3.40	18.20	74.10	7.50	60	13,960	7,756	14,440	8,022	15,610	8,672
Do.	do.	2,033	3.00	18.20	74.00	7.80	65	13,950	7,750	14,390	7,994	15,610	8,672
Do.	do.	2,160	2.70	18.90	73.50	7.70	60	14,080	7,822	14,480	8,044	15,690	8,717
Do.	do.	2,160	2.30	18.30	73.40	8.20	55	14,130	7,850	14,460	8,033	15,760	8,756
Do.	do.	2,160	2.50	17.50	73.40	9.10	55	14,000	7,778	14,410	7,972	15,990	8,700
Do.	do.	2,160	2.20	18.00	73.40	8.30	60	14,190	7,883	14,640	8,133	15,760	8,756
Do.	do.	2,160	2.50	17.20	71.80	8.00	55	14,000	7,782	14,410	8,006	15,660	8,700
Do.	do.	2,160	3.50	20.20	74.90	7.10	60	14,040	7,800	14,440	7,944	15,740	8,744
Do.	do.	2,160	3.10	18.00	73.40	8.30	60	14,040	7,833	14,440	7,944	15,740	8,744
Do.	do.	2,160	2.80	18.30	73.40	8.30	60	14,040	7,833	14,440	7,944	15,740	8,744
Do.	do.	1,028	2.00	17.30	73.50	9.20	55	14,010	7,783	14,300	7,889	15,670	8,706
Do.	do.	1,028	2.20	17.70	72.90	9.40	55	13,890	7,717	14,200	7,850	15,770	8,761
Do.	do.	1,028	1.80	18.40	74.60	7.00	55	14,400	8,000	14,670	8,154	15,760	8,756
Do.	do.	846	2.30	17.30	74.60	8.10	60	14,150	7,861	14,480	8,044	15,760	8,756
Do.	do.	846	2.40	17.00	74.20	8.30	65	14,100	7,833	14,440	8,022	15,750	8,756
Do.	do.	846	2.60	18.00	74.20	7.80	60	14,110	7,839	14,500	8,056	15,740	8,744
Do.	do.	1,645	1.90	17.30	73.60	7.90	55	14,230	7,906	14,500	8,056	15,740	8,744
Do.	do.	1,645	2.20	18.50	73.60	7.90	60	14,110	7,839	14,470	8,039	15,730	8,739
Do.	do.	1,998	2.50	17.30	74.00	8.00	70	14,110	7,839	14,470	8,039	15,730	8,739
Do.	do.	1,998	2.80	17.20	74.40	8.40	65	14,030	7,794	14,430	8,017	15,750	8,750
Do.	do.	1,998	2.10	18.50	73.30	8.20	65	14,120	7,844	14,420	8,011	15,710	8,728
Do.	do.	1,998	2.80	17.20	75.70	7.10	60	14,060	7,811	14,630	8,128	15,750	8,750
Do.	do.	2,066	3.90	17.20	75.60	7.20	60	14,060	7,811	14,630	8,128	15,750	8,750
Do.	do.	2,066	3.80	16.30	75.50	8.20	55	13,750	7,806	14,610	8,117	15,740	8,744
Do.	do.	2,066	4.60	16.30	75.50	8.20	60	14,410	8,006	14,670	8,200	15,740	8,744
Do.	do.	2,013	2.30	19.20	74.60	6.20	65	14,300	7,944	14,670	8,150	15,770	8,761
Do.	do.	2,013	2.50	16.90	76.10	7.00	65	14,400	8,078	14,860	8,256	15,810	8,783
Do.	do.	2,013	2.10	17.70	76.30	6.00	75	13,540	7,772	14,340	7,967	15,640	8,689
Do.	do.	927	2.40	18.80	72.90	8.30	70	13,730	7,628	14,580	8,100	15,730	8,739
Do.	do.	927	2.50	23.20	67.40	9.40	80	13,730	7,628	14,580	8,100	15,730	8,739
Do.	do.	927	3.70	18.80	73.90	7.30	70	14,030	7,794	14,580	8,100	15,730	8,739
Do.	do.	2,034	3.80	16.60	75.40	8.00	60	13,810	7,672	14,360	7,978	15,610	8,672
Do.	do.	2,034	4.50	17.80	75.40	9.10	70	13,810	7,672	14,360	7,978	15,610	8,672
Do.	do.	2,034	3.70	18.70	70.70	10.60	55	13,440	7,467	13,960	7,756	15,610	8,672
Do.	do.	2,034	4.40	17.40	72.70	9.90	60	13,460	7,478	14,070	7,817	15,620	8,683
Do.	do.	2,034	3.70	18.20	71.30	10.50	65	13,470	7,483	13,990	7,772	15,630	8,683
Do.	do.	2,034	3.70	16.90	74.90	8.40	65	13,900	7,792	14,430	8,017	15,750	8,750
Do.	do.	2,225	4.00	17.20	76.60	6.20	60	14,160	7,867	14,750	8,194	15,720	8,733
Do.	do.	2,225	3.90	19.40	70.90	6.20	55	13,590	7,650	14,140	7,856	15,650	8,695
Do.	do.	2,225	3.50	18.50	73.30	8.20	60	13,880	7,711	14,390	7,994	15,700	8,702
Do.	do.	2,225	3.50	17.90	75.90	6.90	55	14,100	7,833	14,610	8,117	15,700	8,702
Do.	do.	2,175	2.60	17.60	73.40	9.00	60	13,840	7,769	14,210	7,894	15,620	8,678
Do.	do.	2,175	2.20	18.40	73.90	7.70	60	13,900	7,772	14,450	8,028	15,660	8,706
Do.	do.	2,175	2.60	17.90	72.10	7.90	55	14,060	7,817	14,390	7,994	15,689	8,689
Do.	do.	2,175	2.80	17.00	73.80	8.20	55	13,980	7,767	14,300	7,967	15,670	8,689
Do.	do.	2,175	2.90	18.00	73.80	8.20	60	13,980	7,767	14,300	7,967	15,670	8,689
Do.	do.	2,175	2.80	18.30	73.20	8.40	55	13,980	7,767	14,300	7,967	15,670	8,689
Do.	do.	2,175	3.00	18.30	73.20	8.40	55	13,800	7,697	14,230	7,906	15,700	8,722
Do.	do.	2,224	1.60	17.30	74.80	7.90	60	14,210	7,894	14,440	8,022	15,680	8,711

TABLE 2.—Analyses of pool coal, Atlantic shipping ports—Continued.
POOL NO. 1, RUN-OF-MINE COAL—Continued.

Consignee.	Port of loading.	Pier.	Date.	Tons delivered.	Proximate analyses.							Calorific value, per pound.			
					As received.	Dry coal.			As received.		Dry coal.		Moisture-free and ash-free.		
						Mois- ture, per cent.	Volat- ile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sul- phur, per cent.	B. t. u.	Calo- ries.	B. t. u.	Calo- ries.	B. t. u.	Calo- ries.
6	7	8	9	10	11	12	13	14	15	16					
Panama Canal	Norfolk, Va.	Lamberts Point	Mar. 30, 1920	2,224	2.10	18.70	74.00	7.30	0.60	14,170	7,872	8,089	15,610	8,672	
Do.	do.	do.	do.	2,224	1.80	17.20	74.60	8.20	.55	14,120	7,844	7,989	15,660	8,705	
Do.	do.	do.	do.	2,224	2.20	17.10	73.80	8.10	.65	13,980	7,767	7,934	15,730	8,729	
Do.	do.	do.	Apr. 30, 1920	1,924	1.80	18.60	72.70	8.40	.85	14,240	7,844	7,989	15,690	8,717	
Do.	do.	do.	do.	1,924	2.00	18.60	74.80	7.60	.60	14,240	7,844	8,072	15,790	8,733	
Do.	do.	do.	do.	1,924	1.40	17.70	75.20	7.10	.55	14,310	7,850	8,067	15,630	8,683	
Do.	do.	do.	do.	1,924	3.20	17.70	76.10	6.20	.45	14,150	7,821	8,117	15,580	8,656	
Do.	do.	do.	June 7, 1920	1,224	3.13	20.24	71.60	7.16	.51	13,894	7,732	8,002	15,683	8,690	
Do.	do.	do.	June 14, 1920	1,224	3.44	18.31	72.85	7.54	.71	13,921	7,734	8,069	15,642	8,689	
Do.	do.	do.	do.	2,216	3.65	19.63	74.80	6.45	.62	14,233	7,807	8,207	15,641	8,712	
Do.	do.	do.	June 21, 1920	2,216	3.15	21.23	72.29	6.45	.62	14,294	7,891	8,147	15,681	8,712	
Do.	do.	do.	do.	2,216	3.27	20.76	71.07	6.45	.61	13,774	7,652	7,911	15,507	8,615	
Do.	do.	do.	do.	2,216	4.60	18.23	74.80	6.97	.73	13,849	7,694	8,065	15,605	8,669	
Average for above 74 analyses, Pool No. 1, Lamberts Point, fiscal year 1920.				135,372	2.90	18.19	73.90	7.91	.60	14,025	7,792	8,024	15,685	8,714	
Panama Canal	Norfolk, Va.	Lamberts Point	July 8, 1920	2,123	2.74	17.38	75.77	6.85	.70	14,265	7,925	8,148	15,744	8,747	
Do.	do.	do.	do.	2,123	3.20	16.63	74.88	5.49	.64	14,479	8,044	8,310	15,827	8,793	
Do.	do.	do.	do.	2,123	3.05	18.99	75.06	5.95	.63	14,371	7,984	8,235	15,761	8,796	
Do.	do.	do.	do.	2,123	2.98	17.98	75.34	6.68	.63	14,270	7,928	8,162	15,744	8,747	
Do.	do.	do.	July 16, 1920	1,988	2.53	20.38	73.38	6.24	.64	14,327	7,959	8,162	15,680	8,711	
Do.	do.	do.	do.	1,988	2.99	19.79	73.41	6.80	.64	14,210	7,894	8,138	15,717	8,732	
Do.	do.	do.	July 26, 1920	1,980	3.59	18.13	74.49	7.38	.53	13,951	7,751	8,039	15,624	8,690	
Do.	do.	do.	do.	1,980	3.50	19.12	72.90	6.58	.51	13,872	7,707	7,986	15,724	8,736	
Do.	do.	do.	do.	1,980	3.35	19.80	72.36	6.66	.50	14,028	7,795	8,063	15,657	8,698	
Do.	do.	do.	do.	1,980	2.74	19.98	72.36	7.66	.55	14,102	7,834	8,149	15,702	8,723	
Do.	do.	do.	do.	1,980	2.94	18.70	73.42	7.88	.52	13,981	7,767	8,002	15,636	8,687	
Do.	do.	do.	do.	1,980	2.55	19.15	73.84	7.01	.59	14,260	7,922	8,129	15,736	8,742	
Do.	do.	do.	Aug. 3, 1920	1,793	2.37	18.23	74.88	6.89	.44	14,257	7,921	8,113	15,684	8,713	

Do.	do.	1.798	2.55	18.05	74.14	6.81	62	14,293	7,907	14,605	8,114	15,672	8,707
Do.	do.	1,798	2.64	18.16	73.45	7.39	53	14,217	7,896	14,602	8,112	15,767	8,759
Do.	do.	1,798	2.92	18.83	73.61	7.39	53	14,139	7,855	14,564	8,091	15,753	8,752
Do.	do.	1,855	3.88	18.08	73.42	6.52	74	14,106	7,857	14,675	8,153	15,699	8,722
Do.	do.	1,855	4.01	18.08	74.92	7.57	58	13,908	7,727	14,520	8,069	15,742	8,746
Do.	do.	1,855	4.94	17.51	74.92	7.57	58	13,908	8,002	14,882	8,268	15,714	8,730
Do.	do.	2,252	3.22	18.68	75.70	6.72	66	14,403	7,887	14,618	8,121	15,671	8,760
Do.	do.	2,252	3.22	18.68	73.69	7.42	66	14,035	7,997	14,503	8,057	15,665	8,705
Do.	do.	2,252	3.35	18.89	74.24	6.25	60	14,220	7,900	14,713	8,174	15,666	8,720
Do.	do.	2,162	2.71	18.69	74.14	7.17	57	14,161	7,967	14,555	8,086	15,680	8,711
Do.	do.	2,162	3.05	18.00	73.97	8.03	47	13,937	7,745	14,375	7,995	15,632	8,683
Do.	do.	2,201	2.49	18.16	74.14	6.70	57	14,214	7,897	14,571	8,095	15,617	8,676
Do.	do.	2,201	2.39	18.54	71.66	9.80	60	13,763	7,646	14,100	7,853	15,632	8,684
Do.	do.	2,177	6.74	18.70	71.78	9.52	68	13,145	7,303	14,095	7,851	15,578	8,654
Do.	do.	2,177	7.75	19.07	71.57	9.36	67	13,739	7,633	14,127	7,848	15,598	8,659
Do.	do.	2,177	6.68	18.49	73.93	7.58	58	14,097	7,832	14,485	8,047	15,673	8,707
Do.	do.	2,177	3.03	19.64	72.52	7.84	54	13,999	7,777	14,436	8,020	15,664	8,702
Do.	do.	2,177	3.03	18.63	73.47	7.90	55	14,010	7,783	14,380	7,989	15,613	8,674
Do.	do.	2,139	2.63	18.44	73.77	7.79	52	14,033	7,796	14,412	8,007	15,630	8,683
Do.	do.	2,139	2.41	18.69	74.95	6.36	59	14,274	7,930	14,626	8,126	15,620	8,715
Do.	do.	2,139	2.03	17.87	75.40	6.73	54	14,335	7,964	14,632	8,126	15,620	8,715
Do.	do.	1,927	2.87	17.40	74.20	8.40	51	13,916	7,731	14,327	7,959	15,641	8,689
Do.	do.	1,927	3.40	17.72	72.56	9.72	66	13,676	7,598	14,158	7,866	15,682	8,712
Do.	do.	1,927	3.48	18.16	74.10	7.74	66	13,676	7,598	14,144	7,866	15,682	8,712
Do.	do.	2,100	2.79	20.53	71.92	7.55	71	13,927	7,737	14,401	8,051	15,674	8,708
Do.	do.	2,100	2.62	18.39	72.96	8.65	61	13,938	7,743	14,441	8,023	15,653	8,696
Do.	do.	2,100	2.62	18.40	72.55	9.05	58	13,894	7,626	14,461	8,051	15,674	8,708
Do.	do.	2,100	2.56	18.39	72.75	8.86	56	13,914	7,719	14,268	7,927	15,688	8,716
Do.	do.	2,100	2.60	18.64	72.01	9.15	62	13,835	7,686	14,204	7,881	15,635	8,686
Do.	do.	2,100	2.93	17.88	74.14	7.98	55	14,020	7,789	14,443	8,024	15,695	8,719
Do.	do.	1,939	2.77	18.46	73.43	8.11	56	14,056	7,809	14,456	8,031	15,732	8,740
Do.	do.	1,939	2.65	19.46	71.88	8.66	55	13,971	7,762	14,351	7,973	15,712	8,729
Do.	do.	1,939	2.64	18.99	72.40	8.61	61	13,902	7,723	14,279	7,933	15,624	8,680
Do.	do.	1,978	3.23	17.88	72.66	8.45	52	13,767	7,648	14,226	7,903	15,711	8,728
Do.	do.	1,978	2.72	18.74	73.02	8.24	55	14,014	7,786	14,406	8,003	15,700	8,722
Do.	do.	1,978	3.27	18.70	74.75	8.55	57	13,778	7,654	14,244	7,913	15,576	8,653
Do.	do.	1,978	2.90	18.16	74.37	7.47	63	14,079	7,822	14,499	8,055	15,670	8,706
Do.	do.	1,978	2.91	18.67	72.63	8.70	55	13,886	7,720	14,313	7,952	15,677	8,709
Do.	do.	2,151	2.84	17.73	71.25	11.03	59	13,537	7,521	13,961	7,701	15,579	8,655
Do.	do.	2,151	2.83	17.72	73.84	8.44	61	13,889	7,716	14,294	7,941	15,612	8,673
Do.	do.	2,151	2.81	18.25	72.93	8.82	58	13,876	7,709	14,277	7,932	15,658	8,689
Do.	do.	2,151	2.48	18.33	72.71	8.06	64	13,877	7,709	14,250	7,907	15,630	8,683
Do.	do.	1,877	3.95	18.32	73.02	8.66	58	13,723	7,624	14,287	7,847	15,642	8,648
Do.	do.	1,877	3.68	18.71	73.12	8.17	66	13,768	7,649	14,294	7,941	15,568	8,648
Do.	do.	1,877	3.87	19.05	72.50	8.36	65	13,896	7,670	14,332	7,943	15,640	8,649
Do.	do.	1,877	3.87	19.03	72.29	8.77	65	13,745	7,636	14,298	7,943	15,673	8,707
Do.	do.	2,004	4.13	17.88	72.25	9.80	51	13,502	7,503	14,084	7,824	15,630	8,683
Do.	do.	2,004	2.85	18.33	71.47	10.20	58	13,657	7,553	14,050	7,806	15,646	8,692
Do.	do.	2,004	3.30	18.85	69.32	10.83	62	13,468	7,452	13,928	7,738	15,618	8,677
Do.	do.	2,004	3.39	18.03	73.21	7.70	58	13,916	7,731	14,404	8,002	15,616	8,676

TABLE 2.—Analyses of pool coal, Atlantic shipping ports—Continued.

POOL NO. 1, RUN-OF-MINE COAL—Continued.

Consignee.	Port of loading.	Pier.	Date.	Tons delivered.	Proximate analyses.					Calorific value, per pound.					
					As received.	Dry coal.			Moisture-free and ash-free.	As received.		Dry coal.		Moisture-free and ash-free.	
						Volatiles, per cent.	Fixed carbon, per cent.	Ash, per cent.		Sulphur, per cent.	B. t. u.	Calorific.	B. t. u.	Calorific.	B. t. u.	Calorific.
6	7	8	9	10	11	12	13	14	15	16					
Panama Canal	Norfolk, Va.	Lambert's Point	Dec. 30, 1920	2,004	3.49	17.90	72.92	9.18	0.70	13,746	7,637	14,243	7,913	15,633	8,713
Do.	do.	do.	do.	2,004	3.78	17.41	75.23	7.36	.55	14,037	7,798	14,588	8,104	15,747	8,748
Do.	do.	do.	do.	1,874	3.49	18.20	72.74	8.97	.57	13,730	7,628	14,226	7,903	15,747	8,682
Do.	do.	do.	Jan. 12, 1921	1,963	3.81	18.04	73.77	8.10	.58	13,823	7,679	14,371	7,984	15,633	8,696
Do.	do.	do.	do.	1,947	3.65	17.34	74.56	8.10	.58	13,900	7,722	14,427	8,015	15,699	8,722
Do.	do.	do.	do.	1,947	2.97	18.41	72.89	8.70	.63	13,811	7,673	14,254	7,908	15,590	8,661
Do.	do.	do.	do.	1,947	2.76	17.18	74.97	7.85	.63	13,983	7,768	14,390	7,998	15,605	8,669
Do.	do.	do.	do.	1,947	2.51	18.25	72.42	8.05	.74	13,891	7,717	14,396	7,988	15,605	8,696
Do.	do.	do.	do.	1,947	3.70	17.70	72.65	8.51	.54	13,556	7,531	14,077	7,821	15,624	8,690
Do.	do.	do.	Jan. 14, 1921	2,146	3.39	17.52	72.80	8.95	.57	13,817	7,676	14,366	7,981	15,702	8,723
Do.	do.	do.	do.	2,146	3.00	18.15	73.79	8.21	.56	13,929	7,738	14,360	7,976	15,708	8,727
Do.	do.	do.	do.	2,146	3.10	18.01	72.98	9.01	.54	13,828	7,682	14,270	7,923	15,683	8,713
Do.	do.	do.	do.	2,146	3.13	17.61	72.43	9.96	.57	13,696	7,609	14,139	7,855	15,703	8,724
Do.	do.	do.	do.	1,813	3.03	18.06	74.24	7.70	.57	14,057	7,809	14,486	7,943	15,646	8,725
Do.	do.	do.	do.	1,813	3.39	17.80	73.58	8.62	.75	13,784	7,638	14,287	7,943	15,646	8,700
Do.	do.	do.	do.	1,813	3.07	18.52	72.84	8.64	.83	13,868	7,704	14,307	7,948	15,660	8,700
Do.	do.	do.	do.	1,813	3.87	17.77	74.27	7.96	.52	13,911	7,728	14,471	8,039	15,723	8,735
Do.	do.	do.	Jan. 21, 1921	2,005	2.39	17.99	73.47	8.54	.57	13,960	7,767	14,322	7,957	15,629	8,699
Do.	do.	do.	do.	2,005	2.58	17.28	73.50	9.22	.57	13,845	7,723	14,212	7,896	15,655	8,697
Do.	do.	do.	do.	2,005	2.40	17.85	73.08	9.07	.69	13,902	7,752	14,244	7,913	15,665	8,703
Do.	do.	do.	do.	2,005	2.38	17.17	73.69	9.14	.63	13,760	7,644	14,095	7,831	15,513	8,618
Do.	do.	do.	do.	2,005	5.37	17.52	73.59	8.89	.49	13,495	7,497	14,261	7,923	15,653	8,696
Do.	do.	do.	do.	2,005	2.24	17.72	72.90	9.38	.60	13,847	7,693	14,164	7,869	15,630	8,683
Do.	do.	do.	Jan. 22, 1921	2,983	2.39	17.75	72.77	9.48	.62	13,838	7,688	14,177	7,876	15,662	8,701
Do.	do.	do.	do.	1,983	2.78	17.92	73.03	9.05	.80	13,845	7,692	14,241	7,912	15,658	8,699
Do.	do.	do.	do.	1,983	2.39	17.96	73.95	8.09	.69	14,058	7,810	14,402	8,001	15,670	8,706
Do.	do.	do.	do.	1,983	2.29	17.33	74.06	8.61	.68	13,906	7,726	14,232	7,907	15,713	8,752

TABLE 2.—Analyses of pool coal, Atlantic shipping ports—Continued.

POOL NO. 1, RUN-OF-MINE—Continued.

Consignee.	Port of loading.	Pier.	Date.	Tons delivered.	Proximate analyses.					Calorific value, per pound.						
					Dry coal.					As received.		Dry coal.		Moisture-free and ash-free.		
					As received.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calorific.	B. t. u.	Calorific.	B. t. u.	Calorific.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Panama Canal.....	Norfolk, Va.....	Lamberts Point.....	Apr. 4, 1921.....	1,960	3.80	22.64	69.74	7.62	1.04	13,959	7,755	14,510	8,061	15,707	8,726	
Do.....	do.....	do.....	do.....	1,960	3.52	19.41	72.27	8.32	.98	13,824	7,776	14,328	7,960	15,628	8,682	
Do.....	do.....	do.....	do.....	1,960	3.42	18.00	74.63	7.37	.74	13,997	7,814	14,493	8,053	15,646	8,692	
Do.....	do.....	do.....	Apr. 22, 1921.....	1,960	3.72	18.07	73.76	8.17	.56	14,066	7,852	14,459	8,032	15,745	8,747	
Do.....	do.....	do.....	do.....	1,960	3.36	17.76	72.92	8.32	.57	13,773	7,852	14,252	7,918	15,717	8,732	
Do.....	do.....	do.....	do.....	1,960	3.88	17.05	73.81	8.24	.69	13,982	7,788	14,397	7,998	15,690	8,717	
Do.....	do.....	do.....	June 11, 1921.....	2,439	2.39	18.45	73.29	8.26	.69	13,968	7,760	14,310	7,950	15,588	8,665	
Do.....	do.....	do.....	do.....	2,439	2.41	18.64	73.38	7.98	.74	14,058	7,810	14,405	8,003	15,655	8,697	
Average for above 152 analyses, Pool No. 1, Lamberts Point, fiscal year 1921.....				306,916	2.97	18.45	73.30	8.25	0.80	13,947	7,748	14,374	7,986	15,668	8,703	
Panama Canal.....	Norfolk, Va.....	Sewalls Point.....	Nov. 13, 1917.....	1,788	2.20	18.80	74.50	6.70	0.84	14,270	7,928	14,590	8,108	15,640	8,689	
Do.....	do.....	do.....	do.....	1,788	2.80	18.70	74.50	6.40	.65	14,310	7,828	14,640	8,133	15,640	8,689	
Do.....	do.....	do.....	do.....	1,788	2.60	19.60	73.50	6.70	.65	14,360	7,978	14,720	8,178	15,670	8,706	
Do.....	do.....	do.....	do.....	1,788	2.90	18.60	74.60	6.80	.65	14,110	7,859	14,580	8,189	15,630	8,683	
Do.....	do.....	do.....	do.....	659	2.40	19.80	73.90	6.70	.60	14,270	7,928	14,620	8,122	15,670	8,706	
Do.....	do.....	do.....	do.....	659	2.90	18.00	73.90	8.10	.60	13,960	7,750	14,360	7,978	15,620	8,678	
Do.....	do.....	do.....	Nov. 23, 1917.....	644	2.50	18.90	74.80	6.30	.75	14,240	7,911	14,600	8,111	15,680	8,656	
Do.....	do.....	do.....	do.....	644	2.80	18.70	73.90	7.50	.70	14,020	7,789	14,400	8,017	15,600	8,667	
Do.....	do.....	do.....	do.....	2,027	2.20	19.00	74.70	6.30	.70	14,360	7,989	14,700	8,167	15,690	8,717	
Do.....	do.....	do.....	do.....	2,027	2.10	17.60	75.00	6.40	.80	14,210	7,893	14,520	8,067	15,680	8,711	
Do.....	do.....	do.....	do.....	2,027	2.20	18.70	74.70	6.60	.70	14,280	7,933	14,600	8,111	15,630	8,683	
Do.....	do.....	do.....	do.....	2,027	2.00	18.10	75.10	6.90	.90	14,280	7,933	14,570	8,094	15,630	8,683	
Do.....	do.....	do.....	Jan. 8, 1918.....	1,107	3.20	20.30	72.30	7.40	.75	14,030	7,794	14,490	8,050	15,650	8,695	
Do.....	do.....	do.....	do.....	1,107	3.10	19.90	72.60	7.50	.75	14,050	7,806	14,490	8,050	15,670	8,706	
Do.....	do.....	do.....	do.....	1,107	2.20	18.80	75.90	5.30	.50	14,490	8,050	14,820	8,233	15,650	8,695	
Do.....	do.....	do.....	do.....	1,107	2.30	18.00	75.50	6.50	.70	14,280	7,933	14,610	8,117	15,630	8,683	

TABLE 2.—Analyses of pool coal, Atlantic shipping ports—Continued.

POOL NO. 1, RUN-OF-MINE—Continued.

Consignee.	Port of loading.	Pier.	Date.	Tons delivered.	Proximate analyses.							Calorific value, per pound.						
					As received.	Dry coal.			As received.		Dry coal.		As received.		Dry coal.		Moisture-free and ash-free.	
						Mois- ture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sul- phur, per cent.	B. t. u.	Calo- ries.	B. t. u.	Calo- ries.	B. t. u.	Calo- ries.	B. t. u.	Calo- ries.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16			
Panama Canal...	Norfolk, Va.....	Sewalls Point.....	Sept. 3, 1919.....	915	2.10	19.60	76.20	4.20	0.80	14,710	8,172	15,020	8,344	15,680	8,711			
Do.....	do.....	do.....	do.....	915	1.80	19.30	76.30	4.40	0.70	14,730	8,183	15,010	8,339	15,700	8,722			
Do.....	do.....	do.....	do.....	915	2.10	18.10	76.10	5.80	0.80	14,450	8,028	14,760	8,200	15,670	8,706			
Do.....	do.....	do.....	Oct. 8, 1919.....	2,003	2.60	17.50	75.60	6.90	0.75	14,170	7,872	14,540	8,078	15,620	8,748			
Do.....	do.....	do.....	do.....	2,003	2.10	17.90	76.50	5.30	0.60	14,510	8,061	14,830	8,239	15,660	8,700			
Do.....	do.....	do.....	do.....	2,003	2.50	18.10	76.50	5.40	0.70	14,420	8,011	14,790	8,217	15,630	8,683			
Do.....	do.....	do.....	do.....	2,003	2.00	18.00	77.30	5.40	0.65	14,530	8,072	14,830	8,239	15,690	8,717			
Do.....	do.....	do.....	do.....	2,003	2.20	17.30	77.30	5.40	0.82	14,530	8,061	14,640	8,244	15,680	8,717			
Do.....	do.....	do.....	Nov. 17, 1919.....	2,001	2.40	17.90	74.80	7.30	0.62	14,400	8,000	14,750	8,194	15,680	8,700			
Do.....	do.....	do.....	do.....	2,001	2.70	17.90	76.50	5.60	0.55	14,440	8,022	14,780	8,211	15,660	8,700			
Do.....	do.....	do.....	do.....	2,001	2.30	18.40	75.80	5.90	0.80	14,370	7,989	14,780	8,211	15,660	8,717			
Do.....	do.....	do.....	do.....	2,001	2.70	18.20	74.90	6.90	0.80	14,290	7,839	14,590	8,106	15,670	8,706			
Do.....	do.....	do.....	do.....	2,001	2.70	18.20	75.00	6.70	0.65	14,290	8,017	14,800	8,181	15,750	8,750			
Do.....	do.....	do.....	do.....	2,001	2.80	18.00	76.40	6.60	0.65	14,430	8,117	14,890	8,272	15,740	8,728			
Do.....	do.....	do.....	Dec. 27, 1919.....	800	1.90	16.50	76.80	6.60	0.75	14,270	8,028	14,630	8,122	15,650	8,744			
Do.....	do.....	do.....	Jan. 23, 1920.....	942	2.40	17.00	76.40	6.60	0.60	14,260	7,922	14,610	8,117	15,700	8,689			
Do.....	do.....	do.....	do.....	942	2.10	17.50	76.60	6.90	0.75	14,310	7,950	14,610	8,117	15,700	8,722			
Do.....	do.....	do.....	Jan. 23, 1920.....	1,071	2.90	16.80	76.10	7.10	0.40	14,100	8,853	14,520	8,067	15,630	8,683			
Do.....	do.....	do.....	Mar. 19, 1920.....	1,829	2.70	17.70	76.30	6.00	0.65	14,310	7,950	14,700	8,167	15,640	8,689			
Do.....	do.....	do.....	do.....	1,829	3.20	17.80	77.90	4.30	0.60	14,520	8,067	15,000	8,353	15,680	8,711			
Do.....	do.....	do.....	do.....	1,829	2.90	19.30	76.20	4.50	0.60	14,460	8,033	14,890	8,272	15,660	8,667			
Do.....	do.....	do.....	do.....	1,829	2.20	18.20	76.10	5.70	0.65	14,410	8,006	14,730	8,183	15,620	8,678			
Do.....	do.....	do.....	Mar. 28, 1920.....	1,839	2.30	18.20	75.60	6.20	0.80	14,380	7,989	14,720	8,178	15,690	8,717			
Do.....	do.....	do.....	do.....	1,839	2.20	17.10	76.70	6.20	0.75	14,360	7,978	14,680	8,156	15,650	8,695			
Do.....	do.....	do.....	do.....	1,839	2.60	18.00	75.80	6.20	0.85	13,850	7,694	14,220	7,900	15,660	8,700			
Do.....	do.....	do.....	do.....	1,839	1.90	18.10	73.90	8.00	0.95	14,090	7,828	14,370	7,983	15,620	8,700			
Do.....	do.....	do.....	do.....	1,839	2.10	19.20	75.30	5.50	0.70	14,540	8,078	14,850	8,250	15,710	8,728			

TABLE 2.—Analyses of pool coal, Atlantic shipping ports—Continued.

POOL NO. 1, RUN-OF-MINE COAL—Continued.

Consignee.	Port of loading.	Pier.	Date.	Tons delivered.	Proximate analyses.										Caloric value, per pound.			
					As received.			Dry coal.			As received.		Dry coal.		As received.		Dry coal.	
					Molts- ture, per cent.	Volatils matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sul- phur, per cent.	B. t. u.	Calo- ries.	B. t. u.	Calo- ries.	B. t. u.	Calo- ries.	B. t. u.	Calo- ries.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16			
Panama Canal	Newport News, Va.	C. & O.	Feb. 4, 1918	1,417	2.50	21.60	73.20	5.20	0.65	14,640	8,133	15,020	8,344	15,840	8,800			
Do.	do.	do.	Feb. 26, 1918	857	2.30	22.70	71.80	5.50	0.70	14,470	8,039	14,810	8,228	15,670	8,706			
Do.	do.	do.	do.	857	2.60	21.40	73.30	5.30	.55	14,390	7,994	14,780	8,211	15,610	8,672			
Do.	do.	do.	do.	857	2.80	22.20	73.40	4.40	.70	14,540	8,078	14,960	8,311	15,650	8,695			
Do.	do.	do.	do.	857	2.70	24.30	70.00	5.70	.60	14,300	7,944	14,700	8,167	15,600	8,667			
Do.	do.	do.	Mar. 30, 1918	1,313	1.90	20.50	73.20	6.30	.75	14,390	7,994	14,660	8,144	15,640	8,689			
Do.	do.	do.	do.	1,313	1.90	20.40	73.00	6.60	.80	14,340	7,967	14,610	8,117	15,640	8,689			
Do.	do.	do.	do.	1,313	2.10	19.10	72.90	8.00	.75	14,070	7,817	14,370	7,983	15,620	8,678			
Do.	do.	do.	do.	1,313	2.20	23.60	69.80	6.60	.85	14,240	7,911	14,560	8,089	15,590	8,661			
Average for above 16 analyses, Pool No. 1, C. & O., fiscal year 1918.....																		
				21,978	2.86	22.08	72.36	5.56	0.72	14,374	7,986	14,797	8,221	15,668	8,704			
Panama Canal	Newport News, Va.	C. & O.	July 5, 1918	2,064	1.70	23.30	71.60	5.10	0.90	14,520	8,067	14,770	8,206	15,570	8,650			
Do.	do.	do.	do.	2,064	1.60	20.60	72.90	6.00	.70	14,280	7,922	14,480	8,050	15,490	8,606			
Do.	do.	do.	do.	2,064	1.50	21.60	72.20	6.00	.85	14,360	7,978	14,560	8,100	15,510	8,617			
Do.	do.	do.	do.	2,064	1.80	23.70	74.40	5.90	1.15	14,380	7,989	14,680	8,139	15,570	8,650			
Do.	do.	do.	July 6, 1918	1,041	1.20	20.70	74.40	4.90	1.70	14,560	8,069	14,740	8,189	15,500	8,611			
Do.	do.	do.	do.	1,041	1.50	23.30	73.10	3.60	.65	14,730	8,183	14,950	8,306	15,500	8,611			
Do.	do.	do.	Aug. 28, 1918	1,537	1.60	21.80	73.40	4.80	1.00	14,640	8,133	14,880	8,267	15,600	8,683			
Do.	do.	do.	do.	1,537	1.20	23.20	72.70	4.10	1.00	14,730	8,211	14,960	8,311	15,600	8,667			
Do.	do.	do.	do.	1,537	1.30	23.10	72.60	4.30	.70	14,780	8,183	14,960	8,294	15,600	8,667			
Do.	do.	do.	do.	1,537	1.50	22.10	71.40	5.20	.85	14,390	7,994	14,610	8,117	15,580	8,656			
Do.	do.	do.	Aug. 29, 1918	1,191	1.40	23.40	71.70	5.20	.80	14,610	8,111	14,820	8,233	15,640	8,689			
Do.	do.	do.	do.	1,191	1.70	20.30	74.50	5.20	.60	14,620	8,122	14,870	8,261	15,690	8,717			
Do.	do.	do.	do.	1,191	1.90	21.20	73.70	5.10	.55	14,600	8,111	14,890	8,272	15,690	8,717			
Do.	do.	do.	do.	1,191	2.70	22.00	72.70	5.30	.65	14,430	8,017	14,850	8,239	15,660	8,700			
Do.	do.	do.	Mar. 1, 1919	988	3.00	23.50	71.80	4.70	.50	14,470	8,039	14,920	8,289	15,650	8,695			
Do.	do.	do.	do.	988	4.20	22.50	72.20	5.30	.55	13,970	7,761	14,580	8,100	15,556	8,656			
Do.	do.	do.	do.	988	2.70	21.90	72.30	5.80	.70	14,340	7,967	14,740	8,189	15,650	8,695			

Do	do	Mar. 18, 1919	1,837	2.10	24.20	71.70	4.10	70	14,710	8,172	15,020	8,844	15,670	8,706
Do	do	do	1,837	2.90	19.80	75.00	5.20	.60	14,450	8,028	14,870	8,261	15,680	8,711
Do	do	do	1,837	2.40	21.50	72.40	6.10	1.10	14,350	7,972	14,700	8,167	15,650	8,695
Do	do	do	1,837	2.60	21.10	72.30	6.60	1.20	14,370	7,928	14,660	8,144	15,690	8,717
Do	do	do	1,837	2.40	23.50	70.00	6.00	.80	14,500	7,944	14,650	8,139	15,580	8,686
Do	do	Apr. 30, 1919	2,013	1.90	21.00	73.90	5.70	.65	14,570	8,094	14,850	8,250	15,650	8,695
Do	do	do	2,013	1.60	21.20	73.10	5.90	.65	14,510	8,060	14,750	8,194	15,640	8,689
Do	do	do	2,013	1.80	22.40	73.70	3.90	.65	14,900	8,222	14,750	8,367	15,670	8,708
Do	do	do	2,013	1.80	22.50	72.20	4.30	.75	14,710	8,172	14,980	8,322	15,660	8,708
Do	do	do	2,013	1.70	21.40	72.40	6.20	.80	14,470	8,039	14,730	8,183	15,710	8,728
Do	do	do	2,013	2.90	23.30	70.90	5.80	.80	14,330	7,961	14,760	8,200	15,670	8,706
Average for above 28 analyses, Pool No. 1, C. & O., fiscal year 1919.														
Panama Canal..... Newport News, Va. C. & O.														
Do	do	Jan. 20, 1920	1,279	2.00	20.70	73.00	6.30	.85	14,460	8,033	14,760	8,200	15,750	8,733
Do	do	do	1,279	2.50	21.10	73.30	5.60	.85	14,470	8,039	14,840	8,244	15,720	8,750
Do	do	Apr. 3, 1920	2,258	2.00	22.70	71.40	5.90	.85	14,430	8,017	14,720	8,178	15,640	8,689
Do	do	do	2,258	1.70	21.70	72.20	6.10	.85	14,460	8,033	14,710	8,172	15,660	8,700
Do	do	do	2,258	1.80	23.40	71.50	5.10	.80	14,540	8,078	14,810	8,228	15,610	8,672
Do	do	do	2,258	2.00	22.40	71.60	6.00	1.15	14,330	7,961	14,630	8,128	15,560	8,644
Do	do	do	1,533	3.20	20.86	73.54	5.60	.91	14,292	7,840	14,764	8,202	15,640	8,689
Average for above 7 analyses, Pool No. 1, C. & O., fiscal year 1920.														
Average of analyses of all Pool No. 1 coal sampled; total tonnage, 1,039,693 tons; average for 693 analyses.														

POOL NO. 2, RUN-OF-MINE COAL.

Panama Canal.....	Norfolk, Va.	Lamberts Point.....	Oct. 14, 1917	1,009	2.40	19.60	74.00	6.40	14,350	7,972	14,700	8,167	15,710	8,728
Do	do	do	do	1,009	1.90	19.60	72.60	7.80	14,200	7,889	14,480	8,044	15,700	8,722
Do	do	do	do	1,009	2.10	18.40	73.90	7.70	14,300	7,989	14,500	8,056	15,710	8,728
Do	do	do	Nov. 17, 1917	1,274	1.90	20.20	72.80	7.00	14,200	7,961	14,610	8,117	15,710	8,728
Do	do	do	do	1,274	1.50	16.50	75.70	7.80	14,210	7,894	14,430	8,017	15,650	8,695
Do	do	do	Dec. 6, 1917	1,120	2.60	17.00	73.90	9.10	13,970	7,761	14,360	7,978	15,800	8,778
Do	do	do	do	1,120	2.60	18.50	73.40	8.10	14,080	7,922	14,460	8,033	15,730	8,739
Do	do	do	do	1,120	2.00	16.00	74.00	10.00	13,880	7,711	13,160	7,867	15,770	8,761
Do	do	do	do	1,120	2.00	19.20	73.30	7.50	14,240	7,911	14,590	8,106	15,770	8,761
Do	do	do	Dec. 13, 1917	1,456	3.30	19.80	71.80	8.40	14,000	7,778	14,470	8,039	15,800	8,778
Do	do	do	do	1,456	4.20	20.20	71.80	8.00	13,880	7,711	14,480	8,044	15,740	8,744
Do	do	do	do	1,456	3.30	17.60	73.00	9.40	13,750	7,639	14,210	7,884	15,690	8,717
Do	do	do	do	1,456	3.20	17.90	73.10	9.00	13,760	7,644	14,220	7,900	15,630	8,683
Do	do	do	do	1,456	3.20	19.60	71.20	10.20	13,670	7,594	14,120	7,844	15,720	8,733
Do	do	do	do	1,456	3.20	19.60	71.20	9.20	13,600	7,689	14,300	7,944	15,750	8,750
Do	do	do	do	1,456	2.50	21.00	71.50	7.50	14,130	7,733	14,500	8,056	15,680	8,711
Do	do	do	do	1,456	3.70	18.70	73.20	8.10	13,920	7,628	14,450	8,028	15,720	8,733
Do	do	do	do	1,456	3.90	18.70	73.40	8.40	13,730	7,538	14,290	7,939	15,720	8,733
Do	do	do	Dec. 22, 1917	1,456	2.50	18.10	72.00	9.90	13,830	7,683	14,180	7,878	15,730	8,739
Do	do	do	do	1,456	3.40	19.60	73.10	7.30	14,050	7,806	14,550	8,063	15,700	8,722

TABLE 2.—Analyses of pool coal, Atlantic shipping ports—Continued.
POOL NO. 2, RUN-OF-MINE COAL—Continued.

Consignee.	Port of loading.	Pier.	Date.	Tons delivered.	Proximate analyses.										Calorific value, per pound.					
					As received.				Dry coal.			As received.			Dry coal.		Moisture-free and ash-free.			
					Mois- ture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sul- phur, per cent.	7	8	9	10	B. t. u.	Calo- ries.	B. t. u.	Calo- ries.	B. t. u.	Calo- ries.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16					
Panama Canal	Norfolk, Va.	Lamberts Point	Dec. 26, 1917	1,110	1.90	20.60	71.30	8.10	0.50	14,140	7,956	14,410	8,006	15,680	8,711					
Do.	do.	do.	do.	1,110	2.30	21.30	71.90	6.80	.45	14,330	7,961	14,640	8,133	15,710	8,728					
Do.	do.	do.	do.	1,110	1.90	19.60	72.70	7.70	.50	14,240	7,911	14,510	8,061	15,730	8,733					
Do.	do.	do.	do.	1,737	2.30	17.90	73.40	7.30	.45	13,240	7,911	14,590	8,106	15,740	8,734					
Do.	do.	do.	Jan. 2, 1918	1,737	2.60	17.90	72.90	8.20	.50	13,400	7,722	14,230	7,906	15,670	8,706					
Do.	do.	do.	do.	1,737	2.60	18.10	72.10	8.80	.55	13,760	7,944	14,420	7,844	15,660	8,700					
Do.	do.	do.	do.	1,737	2.80	19.00	72.30	8.70	.50	13,860	7,700	14,260	7,922	15,660	8,700					
Do.	do.	do.	do.	1,737	3.40	19.00	72.70	7.60	.45	14,010	7,783	14,360	7,978	15,730	8,739					
Do.	do.	do.	do.	1,737	2.70	19.70	71.80	9.40	.55	13,810	7,778	14,470	8,039	15,660	8,706					
Do.	do.	do.	do.	1,737	2.60	20.40	70.90	7.80	.50	14,090	7,828	14,200	8,033	15,660	8,717					
Do.	do.	do.	do.	1,737	2.30	17.30	73.30	9.40	.45	13,910	7,728	14,240	7,911	15,720	8,733					
Do.	do.	do.	do.	1,585	2.90	19.40	71.80	8.80	.60	13,990	7,772	14,400	8,000	15,780	8,772					
Do.	do.	do.	do.	1,585	2.90	21.80	69.80	8.40	.70	13,900	7,722	14,310	7,950	15,620	8,678					
Do.	do.	do.	do.	1,585	2.60	18.30	71.60	10.10	.60	13,700	7,611	14,070	7,817	15,650	8,685					
Do.	do.	do.	do.	1,585	2.30	20.60	71.20	8.20	.55	14,050	7,906	14,370	7,983	15,650	8,685					
Do.	do.	do.	do.	1,585	2.60	21.00	72.00	7.00	.45	14,230	7,906	14,620	8,122	15,720	8,733					
Do.	do.	do.	do.	1,585	3.10	20.70	71.60	7.70	.50	14,080	7,822	14,540	8,078	15,760	8,756					
Do.	do.	do.	do.	1,585	2.50	19.60	73.60	6.80	.45	14,240	7,911	14,610	8,117	15,680	8,711					
Do.	do.	do.	do.	701	2.80	21.20	71.90	6.90	.55	14,120	7,844	14,530	8,072	15,610	8,672					
Do.	do.	do.	do.	1,752	4.00	20.30	71.90	8.90	.55	13,970	7,761	14,550	8,083	15,780	8,767					
Do.	do.	do.	do.	1,752	4.10	18.40	73.20	8.90	.50	13,820	7,678	14,400	8,000	15,720	8,733					
Do.	do.	do.	do.	1,752	3.60	18.20	72.90	8.90	.50	13,740	7,633	14,260	7,922	15,660	8,700					
Do.	do.	do.	do.	1,752	3.50	17.70	72.80	9.50	.45	13,720	7,900	14,210	7,894	15,720	8,722					
Do.	do.	do.	do.	1,097	2.40	18.40	74.30	7.30	.50	14,220	7,900	14,570	8,094	15,700	8,733					
Do.	do.	do.	do.	1,097	1.90	18.30	72.60	9.10	.55	13,940	7,744	14,220	7,900	15,650	8,695					
Do.	do.	do.	do.	1,097	2.30	17.90	72.80	9.70	.55	13,870	7,706	14,190	7,883	15,710	8,728					
Do.	do.	do.	do.	1,097	2.40	18.10	72.40	9.50	.55	13,860	7,700	14,200	7,889	15,690	8,717					
Do.	do.	do.	do.	1,979	2.40	19.50	73.50	7.00	.55	14,320	7,956	14,670	8,150	15,770	8,761					

TABLE 2.—Analyses of pool coal, Atlantic shipping ports—Continued.
 POOL NO. 2, RUN-OF-MINE COAL—Continued.

Consignee.	Port of loading.	Pier.	Date.	Tons deliv- ered.	Proximate analyses.						Calorific value, per pound.						
					As re- ceived.	Dry coal.			As re- ceived.	Dry coal.			As re- ceived.	Dry coal.			Moisture-free and ash-free.
						Mois- ture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.		Ash, per cent.	Sul- phur, per cent.	B. t. u.		Calo- ries.	B. t. u.	Calo- ries.		B. t. u.	Calo- ries.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Panama Canal....	Norfolk, Va.....	Lamberts Point.....	May 25, 1918	1,351	2.50	19.90	72.10	8.00	0.45	14,000	7,778	14,360	7,978	15,610	8,672		
Do.....	do.....	do.....	do.....	1,351	2.20	17.30	72.30	10.00	.45	13,680	7,772	13,980	7,772	15,540	8,633		
Do.....	do.....	do.....	do.....	1,351	2.30	17.30	73.50	9.20	.45	13,770	7,650	14,090	7,828	15,510	8,617		
Do.....	do.....	do.....	do.....	1,351	3.40	18.60	72.10	9.30	.55	13,660	7,589	14,130	7,850	15,580	8,656		
Do.....	do.....	do.....	May 26, 1918	1,757	2.00	17.30	73.40	9.30	.40	13,960	7,700	14,140	7,856	15,590	8,661		
Do.....	do.....	do.....	do.....	1,757	2.20	17.80	73.90	8.30	.50	13,980	7,767	14,290	7,939	15,590	8,656		
Do.....	do.....	do.....	do.....	1,757	2.20	18.00	72.00	10.00	.60	13,820	7,511	13,970	7,761	15,520	8,622		
Do.....	do.....	do.....	do.....	1,757	2.20	17.80	72.80	9.20	.65	13,820	7,678	14,130	7,850	15,560	8,644		
Do.....	do.....	do.....	May 31, 1918	1,478	2.80	18.90	72.60	8.90	.35	13,950	7,750	14,350	7,972	15,650	8,665		
Do.....	do.....	do.....	do.....	1,478	3.00	18.00	73.50	8.50	.35	13,840	7,689	14,240	7,911	15,630	8,661		
Do.....	do.....	do.....	do.....	1,478	3.00	18.00	73.50	8.50	.65	13,840	7,689	14,270	7,928	15,590	8,639		
Do.....	do.....	do.....	do.....	1,478	3.50	17.30	69.20	13.50	.40	12,980	7,211	13,450	7,472	15,550	8,639		
Do.....	do.....	do.....	do.....	1,478	3.50	17.20	72.40	10.40	.60	13,480	7,489	13,960	7,756	15,580	8,656		
Do.....	do.....	do.....	do.....	1,478	2.40	16.80	73.60	9.60	.65	13,780	7,656	14,130	7,844	15,610	8,672		
Do.....	do.....	do.....	do.....	1,478	2.40	16.80	73.60	9.60	.65	13,780	7,656	14,130	7,844	15,610	8,672		
Do.....	do.....	do.....	June 8, 1918	973	1.70	17.30	74.40	8.30	.55	14,070	7,817	14,320	7,956	15,620	8,678		
Do.....	do.....	do.....	do.....	973	2.90	17.90	73.10	8.00	.55	13,860	7,700	14,270	7,928	15,620	8,678		
Do.....	do.....	do.....	do.....	973	2.30	18.30	73.20	8.50	.45	14,000	7,778	14,300	7,961	15,670	8,711		
Do.....	do.....	do.....	do.....	973	2.40	18.20	72.70	8.10	.45	14,040	7,800	14,300	7,994	15,670	8,706		
Do.....	do.....	do.....	do.....	1,482	3.00	20.60	72.30	6.80	.45	14,230	7,900	14,660	8,144	15,730	8,700		
Do.....	do.....	do.....	June 10, 1918	1,482	2.90	17.90	71.80	10.30	.65	13,760	7,611	14,090	7,838	15,710	8,728		
Do.....	do.....	do.....	do.....	1,482	2.90	18.00	71.40	10.60	.40	13,690	7,606	14,100	7,833	15,730	8,728		
Do.....	do.....	do.....	do.....	1,482	2.70	18.20	72.30	8.50	.35	14,030	7,794	14,420	8,011	15,750	8,757		
Do.....	do.....	do.....	do.....	1,562	2.80	18.40	73.00	7.60	.40	14,150	7,861	14,550	8,083	15,750	8,756		
Do.....	do.....	do.....	June 20, 1918	1,562	2.30	18.90	72.10	8.00	.45	14,130	7,844	14,580	8,083	15,710	8,728		
Do.....	do.....	do.....	do.....	1,562	2.60	18.00	71.70	9.30	.55	13,880	7,711	14,240	7,911	15,700	8,722		
Do.....	do.....	do.....	do.....	1,562	2.20	19.40	72.90	7.70	.35	14,160	7,867	14,480	8,044	15,680	8,711		
Average for above 128 analyses, Pool No. 2, Lamberts Point, fiscal year 1918 ..				180,242	2.65	18.57	72.84	8.59	.54	13,950	7,750	14,330	7,961	15,677	8,709		

Panama Canal...	Norfolk, Va.....	Lamberts Point.....	July 10, 1918	1.90	18.10	73.20	8.70	0.45	14.020	7.789	14.280	7.933	15.640	8.689
Do	do	do	do	2.20	20.10	73.90	6.00	.80	14.470	8.089	14.780	8.217	15.780	8.739
Do	do	do	do	3.50	17.80	74.00	8.20	.89	13.810	7.072	14.360	7.967	15.620	8.678
Do	do	do	July 12, 1918	3.50	17.60	74.10	8.30	.99	13.860	7.700	14.300	7.978	15.660	8.700
Do	do	do	do	3.50	17.20	74.40	8.30	.65	13.780	7.605	14.280	7.933	15.590	8.661
Do	do	do	do	3.50	16.90	75.20	8.30	.60	14.080	7.934	14.430	8.017	15.730	8.739
Do	do	do	do	2.50	19.10	72.70	8.20	.60	14.140	7.878	14.460	8.033	15.750	8.767
Do	do	do	Aug. 16, 1918	2.50	19.90	72.00	8.10	.55	14.140	7.878	14.510	8.061	15.760	8.756
Do	do	do	do	2.50	18.50	73.00	8.50	.60	14.070	7.917	14.420	8.011	15.760	8.761
Do	do	do	do	2.50	18.20	74.30	8.20	.60	14.320	7.956	14.630	8.128	15.770	8.756
Do	do	do	do	2.60	17.10	72.40	10.50	.65	13.730	7.628	14.190	7.828	15.670	8.706
Do	do	do	do	2.60	18.00	71.80	9.40	.90	13.830	7.708	14.110	7.839	15.600	8.667
Do	do	do	do	1.02	17.00	72.40	8.90	.55	13.870	7.708	14.310	7.856	15.610	8.728
Do	do	do	do	1.02	18.00	71.80	8.60	.55	13.960	7.756	14.130	7.850	15.730	8.700
Do	do	do	do	2.00	16.40	75.00	8.60	.55	14.030	7.794	14.320	7.956	15.660	8.728
Do	do	do	do	2.00	16.30	73.50	10.20	.55	13.710	7.617	14.130	7.850	15.730	8.739
Do	do	do	do	2.70	17.60	73.50	8.90	.55	13.920	7.733	14.300	7.944	15.700	8.722
Do	do	do	do	2.70	16.60	76.50	6.90	.55	14.330	7.961	14.640	8.133	15.720	8.733
Do	do	do	do	2.40	17.10	78.10	4.90	.50	14.630	8.128	14.990	8.328	15.750	8.750
Do	do	do	do	2.30	17.80	72.50	9.70	.55	13.850	7.694	14.170	7.872	15.690	8.717
Do	do	do	Aug. 24, 1918	2.70	17.80	74.90	9.30	.50	14.130	7.850	14.530	8.072	15.670	8.706
Do	do	do	do	3.00	17.80	72.90	7.30	.55	13.760	7.644	14.180	7.878	15.640	8.689
Do	do	do	do	3.00	18.00	72.80	9.20	.60	13.780	7.656	14.160	7.867	15.590	8.661
Do	do	do	do	2.70	18.10	72.40	8.50	.60	13.980	7.767	14.310	7.950	15.640	8.672
Do	do	do	do	2.30	19.10	72.40	10.60	.65	13.700	7.611	13.970	7.761	15.610	8.717
Do	do	do	do	1.035	17.50	71.90	10.50	.70	14.200	7.889	14.020	7.789	15.690	8.717
Do	do	do	do	1.035	16.10	76.00	7.90	.70	14.200	7.889	14.500	8.056	15.740	8.744
Do	do	do	do	2.00	17.30	71.90	10.80	.55	13.670	7.606	14.070	7.817	15.660	8.695
Do	do	do	do	2.70	17.20	72.70	10.10	.75	13.690	7.606	14.380	7.989	15.660	8.700
Do	do	do	do	2.70	17.10	74.70	8.20	.70	14.000	7.717	14.060	7.811	15.670	8.706
Do	do	do	do	2.70	18.70	72.10	10.10	.75	13.740	7.633	14.350	8.028	15.690	8.717
Do	do	do	do	2.30	16.90	74.20	8.90	.75	14.170	7.872	14.450	8.028	15.630	8.689
Do	do	do	do	1.095	16.60	75.50	7.90	.65	13.600	7.556	13.950	7.750	15.630	8.683
Do	do	do	do	1.095	17.00	72.30	10.70	.55	13.610	7.561	13.830	7.739	15.630	8.689
Do	do	do	do	2.30	18.70	71.30	10.90	.55	14.060	7.811	14.410	8.006	15.680	8.689
Do	do	do	do	2.50	18.00	73.20	8.10	.60	14.020	7.789	14.300	7.944	15.680	8.711
Do	do	do	do	1.90	17.50	72.10	10.40	.60	13.850	7.694	14.050	7.806	15.680	8.711
Do	do	do	do	2.30	17.40	73.70	8.20	.65	13.940	7.744	14.270	7.928	15.660	8.700
Do	do	do	do	2.30	18.70	73.10	8.20	.60	13.950	7.750	14.410	8.006	15.700	8.722
Do	do	do	do	2.50	17.70	74.50	8.10	.60	14.030	7.794	14.400	8.000	15.670	8.706
Do	do	do	do	2.30	16.90	74.20	9.20	.60	14.090	7.789	14.360	7.978	15.730	8.739
Do	do	do	do	2.30	17.80	73.60	8.30	.60	13.920	7.733	14.240	7.911	15.690	8.717
Do	do	do	do	1.80	17.90	73.60	8.20	.55	14.060	7.811	14.320	7.956	15.710	8.728
Do	do	do	do	2.20	17.70	73.90	7.20	.55	13.800	7.775	14.200	8.017	15.720	8.730
Do	do	do	do	2.20	17.70	73.90	9.20	.55	13.970	7.717	14.300	8.072	15.740	8.744
Do	do	do	do	2.20	18.00	72.20	8.00	.60	13.800	7.689	14.530	8.072	15.740	8.744
Do	do	do	do	2.60	18.60	72.40	9.00	.60	13.900	7.700	14.260	7.917	15.710	8.713
Do	do	do	do	2.60	18.80	73.00	10.20	.45	13.750	7.639	14.100	7.628	15.680	8.739
Do	do	do	do	2.60	16.80	72.20	8.60	.45	13.750	7.639	14.100	7.833	15.590	8.661
Do	do	do	do	2.00	18.00	72.30	9.70	.55	13.800	7.667	14.080	7.822	15.590	8.661

TABLE 2.—Analyses of pool coal, Atlantic shipping ports—Continued.
POOL NO. 2, RUN-OF-MINE COAL—Continued.

Consignee.	Port of loading.	Pier.	Date.	Tons delivered.	Proximate analyses.					Caloric value, per pound.					
					As received.	Dry coal.			Moisture-free and ash-free.	Dry coal.		Moisture-free and ash-free.			
						B. t. u.	Fixed carbon, per cent.	Ash, per cent.		Sulphur, per cent.	B. t. u.		Calo-ries.	B. t. u.	Calo-ries.
6	7	8	9	10	11	12	13	14	15	16					
Panama Canal.....	Norfolk, Va.....	Lamberts Point.....	Sept. 27, 1918	1,316	1.70	18.50	72.60	8.90	0.50	14,020	7,789	14,260	7,922	15,660	8,700
Do.....	do.....	do.....	do.....	1,316	1.70	18.30	73.50	8.20	.60	14,090	7,828	14,330	7,961	15,610	8,672
Do.....	do.....	do.....	Sept. 30, 1918	1,874	2.60	18.40	73.10	8.50	.60	13,980	7,857	14,350	7,972	15,680	8,711
Do.....	do.....	do.....	do.....	874	1.80	16.70	76.20	7.10	.60	14,290	7,939	14,550	8,083	15,670	8,706
Do.....	do.....	do.....	do.....	874	2.10	16.40	76.80	6.90	.55	14,300	7,944	14,610	8,117	15,680	8,711
Do.....	do.....	do.....	do.....	874	3.30	17.00	73.50	9.50	.50	13,720	7,822	14,180	7,878	15,670	8,706
Do.....	do.....	do.....	Oct. 3, 1918	897	2.40	18.20	74.10	7.70	.75	14,150	7,881	14,500	8,058	15,710	8,728
Do.....	do.....	do.....	do.....	897	2.30	17.40	74.80	7.90	.50	14,200	7,899	14,530	8,072	15,760	8,758
Do.....	do.....	do.....	do.....	897	2.50	18.30	72.10	9.60	.45	13,780	7,856	14,130	7,850	15,630	8,683
Do.....	do.....	do.....	Oct. 4, 1918	1,076	2.00	16.60	73.50	8.90	.45	13,760	7,844	14,130	7,847	15,680	8,711
Do.....	do.....	do.....	do.....	1,076	2.60	17.00	73.20	8.90	.65	14,070	7,917	14,340	7,947	15,730	8,739
Do.....	do.....	do.....	do.....	1,076	2.80	16.70	74.70	8.40	.60	13,970	7,901	14,360	7,969	15,670	8,739
Do.....	do.....	do.....	Oct. 5, 1918	1,081	2.80	16.90	74.00	8.40	.55	13,940	7,944	14,220	7,900	15,670	8,717
Do.....	do.....	do.....	do.....	1,081	1.90	16.60	73.80	7.70	.55	14,180	7,878	14,460	8,033	15,670	8,706
Do.....	do.....	do.....	do.....	1,081	2.00	17.30	72.80	9.90	.60	13,980	7,772	14,440	8,022	15,750	8,711
Do.....	do.....	do.....	Dec. 31, 1918	1,437	3.10	16.70	75.00	8.30	.60	14,050	7,806	14,360	7,989	15,730	8,739
Do.....	do.....	do.....	do.....	1,437	2.80	17.00	74.40	8.60	1.00	13,600	7,586	13,920	7,733	15,670	8,706
Do.....	do.....	do.....	do.....	1,437	2.60	16.90	74.50	8.60	.65	13,970	7,761	14,340	7,967	15,660	8,717
Do.....	do.....	do.....	do.....	1,437	2.30	16.60	74.80	11.20	.50	13,420	7,486	13,850	7,694	15,650	8,695
Do.....	do.....	do.....	Feb. 19, 1919	708	3.10	16.60	71.90	11.50	.65	13,470	7,633	14,180	7,878	15,700	8,722
Do.....	do.....	do.....	do.....	708	2.40	17.40	72.90	6.90	.75	14,340	7,967	14,690	8,161	15,770	8,758
Do.....	do.....	do.....	Feb. 26, 1919	708	3.00	17.20	72.80	10.00	.65	13,710	7,617	14,130	7,850	15,730	8,728
Do.....	do.....	do.....	do.....	708	3.00	18.20	73.50	8.30	.70	14,000	7,778	14,430	8,017	15,730	8,728
Do.....	do.....	do.....	do.....	775	3.10	17.50	72.50	10.00	.70	13,680	7,600	14,120	7,844	15,690	8,717
Do.....	do.....	do.....	Feb. 27, 1919	775	3.50	17.70	73.60	8.70	.70	13,840	7,689	14,340	7,987	15,700	8,722
Do.....	do.....	do.....	do.....	775	3.50	17.90	72.00	10.10	.70	13,620	7,567	14,110	7,859	15,700	8,722

Do.	do.	do.	do.	17.70	75.60	6.70	60	14,260	7,922	14,700	8,167	15,760	8,756
Do.	do.	do.	do.	19.30	73.00	7.70	.60	13,980	7,757	14,490	8,050	15,760	8,722
Do.	do.	do.	do.	19.20	71.70	9.10	.60	13,780	7,656	14,230	7,906	15,650	8,695
Do.	do.	do.	do.	18.40	71.90	9.70	.60	13,710	7,617	14,180	7,878	15,700	8,722
Do.	do.	do.	do.	19.30	73.60	7.10	.75	14,250	7,917	14,630	8,128	15,750	8,750
Do.	do.	do.	do.	17.70	73.50	8.80	.65	13,990	7,772	14,290	7,939	15,670	8,706
Do.	do.	do.	do.	17.80	75.30	6.90	.55	14,260	7,922	14,630	8,128	15,720	8,733
Do.	do.	do.	do.	16.30	74.20	9.50	.60	13,790	7,661	14,180	7,878	15,670	8,706
Do.	do.	do.	do.	17.20	73.40	10.40	.60	13,640	7,578	14,080	7,822	15,710	8,728
Do.	do.	do.	do.	17.70	72.40	8.90	.75	13,910	7,728	14,260	7,922	15,660	8,700
Do.	do.	do.	do.	17.70	71.90	10.40	.60	13,620	7,567	14,050	7,806	15,680	8,711
Do.	do.	do.	do.	18.10	72.00	9.00	.90	13,650	7,583	14,120	7,844	15,670	8,706
Do.	do.	do.	do.	18.10	73.40	8.50	.60	13,920	7,734	14,350	7,972	15,690	8,711
Do.	do.	do.	do.	16.50	74.90	8.60	.65	14,030	7,794	14,260	7,922	15,660	8,700
Do.	do.	do.	do.	17.30	74.20	8.50	.50	13,980	7,767	14,350	7,972	15,680	8,711
Do.	do.	do.	do.	17.00	75.60	7.40	.55	14,080	7,822	14,490	8,050	15,630	8,683
Do.	do.	do.	do.	16.80	75.60	7.60	.60	14,040	7,800	14,440	8,022	15,630	8,683
Do.	do.	do.	do.	17.70	75.60	7.50	.65	14,150	7,861	14,490	8,050	15,660	8,700
Do.	do.	do.	do.	17.70	74.70	7.60	.60	14,150	7,861	14,510	8,061	15,710	8,728
Do.	do.	do.	do.	18.20	73.80	8.00	.55	14,060	7,811	14,450	8,028	15,710	8,728
Do.	do.	do.	do.	18.20	73.90	7.90	.65	13,950	7,750	14,410	8,006	15,650	8,695
Do.	do.	do.	do.	17.60	74.90	7.90	.60	13,840	7,689	14,390	7,994	15,644	8,695
Do.	do.	do.	do.	17.90	73.60	8.50	.70	13,750	7,639	14,290	7,939	15,620	8,678
Do.	do.	do.	do.	17.65	73.58	8.77	.62	13,942	7,745	14,307	7,948	15,632	8,712
Do.	do.	do.	do.	2.55	17.65	10.25	.62	13,700	7,611	13,990	7,772	15,610	8,672
Do.	do.	do.	do.	2.10	17.60	10.40	0.95	13,590	7,552	14,130	7,850	15,630	8,683
Do.	do.	do.	do.	2.30	16.70	11.20	.75	13,450	7,472	13,750	7,639	15,480	8,600
Do.	do.	do.	do.	2.01	18.80	10.20	.75	13,660	7,586	13,970	7,761	15,550	8,639
Do.	do.	do.	do.	2.10	18.10	11.00	.95	13,410	7,489	13,840	7,689	15,550	8,639
Do.	do.	do.	do.	2.02	17.80	10.50	.80	13,480	7,517	13,920	7,733	15,550	8,639
Do.	do.	do.	do.	2.70	18.10	9.90	.65	13,600	7,608	14,070	7,817	15,610	8,672
Do.	do.	do.	do.	2.02	17.50	10.50	.80	13,590	7,590	13,930	7,739	15,560	8,644
Do.	do.	do.	do.	2.80	18.00	11.10	.75	13,530	7,517	13,920	7,739	15,670	8,728
Do.	do.	do.	do.	2.50	17.40	11.00	.70	13,620	7,567	13,960	7,756	15,670	8,728
Do.	do.	do.	do.	2.03	18.10	10.90	.75	13,700	7,611	14,050	7,806	15,600	8,667
Do.	do.	do.	do.	2.03	17.40	11.60	.60	13,590	7,517	13,840	7,689	15,660	8,700
Do.	do.	do.	do.	2.06	17.70	11.60	.65	13,770	7,654	14,200	7,889	15,690	8,717
Do.	do.	do.	do.	3.42	17.80	8.50	.65	13,670	7,594	14,310	7,930	15,650	8,695
Do.	do.	do.	do.	3.34	16.40	11.90	.60	13,520	7,511	13,930	7,739	15,670	8,706
Do.	do.	do.	do.	3.60	17.40	10.30	.65	13,540	7,522	14,050	7,806	15,620	8,678
Do.	do.	do.	do.	3.60	17.00	10.30	.65	13,780	7,626	14,010	7,783	15,620	8,678
Do.	do.	do.	do.	3.60	16.50	9.30	.65	13,950	7,750	14,160	7,867	15,640	8,689
Do.	do.	do.	do.	4.44	18.50	11.80	.90	13,460	7,488	13,740	7,633	15,580	8,656
Do.	do.	do.	do.	2.44	17.00	7.70	.90	13,950	7,750	14,190	7,933	15,640	8,689
Do.	do.	do.	do.	3.19	17.42	9.37	.90	13,579	7,644	14,027	7,793	15,563	8,646
Do.	do.	do.	do.	3.83	18.59	8.31	1.08	13,826	7,681	14,377	7,987	15,680	8,711
Do.	do.	do.	do.	2.75	17.65	10.25	.76	13,632	7,573	14,017	7,787	15,618	8,672
Do.	do.	do.	do.	39,516	72.10	10.25							

Average for above 103 analyses, Pool No. 2, Lamberts Point, fiscal year 1919 . . .

Panama Canal	Norfolk, Va	Lamberts Point	Sept. 23, 1919	102,958	73.58	8.77	.62	13,942	7,745	14,307	7,948	15,632	8,712
Do.	do.	do.	do.	1,677	72.00	10.40	0.95	13,700	7,611	13,990	7,772	15,610	8,672
Do.	do.	do.	do.	1,871	73.70	9.60	.75	13,590	7,552	14,130	7,850	15,630	8,683
Do.	do.	do.	do.	2,081	70.40	11.20	.75	13,450	7,472	13,750	7,639	15,480	8,600
Do.	do.	do.	do.	2,081	71.00	10.20	.95	13,660	7,586	13,970	7,761	15,550	8,639
Do.	do.	do.	do.	2,032	70.90	11.00	.80	13,410	7,489	13,840	7,689	15,550	8,639
Do.	do.	do.	do.	2,032	71.80	10.50	.65	13,480	7,517	13,920	7,733	15,550	8,639
Do.	do.	do.	do.	2,032	72.00	9.90	.80	13,600	7,608	14,070	7,817	15,610	8,672
Do.	do.	do.	do.	1,497	71.50	10.50	.80	13,590	7,590	13,930	7,739	15,560	8,644
Do.	do.	do.	do.	2,003	71.50	11.10	.75	13,530	7,517	13,960	7,756	15,670	8,728
Do.	do.	do.	do.	2,003	72.00	10.90	.70	13,620	7,567	13,960	7,756	15,670	8,728
Do.	do.	do.	do.	2,003	18.10	11.00	.60	13,700	7,611	14,050	7,806	15,600	8,667
Do.	do.	do.	do.	2,006	17.40	11.60	.65	13,590	7,517	13,840	7,689	15,660	8,700
Do.	do.	do.	do.	2,006	17.70	11.60	.65	13,770	7,654	14,200	7,889	15,690	8,717
Do.	do.	do.	do.	1,342	17.80	8.50	.65	13,670	7,594	14,310	7,930	15,650	8,695
Do.	do.	do.	do.	1,354	16.40	11.90	.60	13,520	7,511	13,930	7,739	15,670	8,706
Do.	do.	do.	do.	1,670	17.40	10.30	.65	13,540	7,522	14,050	7,806	15,620	8,678
Do.	do.	do.	do.	1,640	17.00	10.30	.65	13,780	7,626	14,010	7,783	15,620	8,678
Do.	do.	do.	do.	2,444	16.50	9.30	.65	13,950	7,750	14,160	7,867	15,640	8,689
Do.	do.	do.	do.	2,444	18.50	11.80	.90	13,460	7,488	13,740	7,633	15,580	8,656
Do.	do.	do.	do.	2,444	17.00	7.70	.90	13,950	7,750	14,190	7,933	15,640	8,689
Do.	do.	do.	do.	1,507	17.42	9.37	.90	13,579	7,644	14,027	7,793	15,563	8,646
Do.	do.	do.	do.	1,750	18.59	8.31	1.08	13,826	7,681	14,377	7,987	15,680	8,711
Do.	do.	do.	do.	2.75	17.65	10.25	.76	13,632	7,573	14,017	7,787	15,618	8,672

Average for above 22 analyses, Pool No. 2, Lamberts Point, fiscal year 1920 . . .

TABLE 2.—Analyses of pool coal, Atlantic shipping ports—Continued.

POOL NO. 2, RUN-OF-MINE COAL—Continued.

Consignee.	Port of loading.	Pier.	Date.	Tons delivered.	Proximate analyses.				Calorific value, per pound.				Moisture-free and ash-free.		
					As received.	Dry coal.			As received.	Dry coal.				Moisture-free and ash-free.	
						Volatiles, per cent.	Fixed carbon, per cent.	Ash, per cent.		Sulphur, per cent.	B. t. u.	Calorific.			B. t. u.	Calorific.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Panama Canal.....	Norfolk, Va.....	Lamberts Point.....	Aug. 3, 1920.....	2,475	3.26	18.87	73.87	7.26	0.67	14,144	7,958	14,621	8,123	15,766	8,759
Do.....	do.....	do.....	Aug. 6, 1920.....	1,468	4.15	18.90	72.82	8.28	.65	13,697	7,609	14,290	7,630	15,580	8,656
Do.....	do.....	do.....	Aug. 17, 1920.....	2,653	2.69	18.40	74.27	7.13	.83	14,187	7,877	14,589	8,088	15,677	8,709
Do.....	do.....	do.....	Sept. 24, 1920.....	1,666	2.96	19.45	73.21	7.34	.58	14,052	7,843	14,481	8,045	15,628	8,682
Do.....	do.....	do.....	do.....	1,666	3.42	18.39	74.78	6.83	.58	14,128	7,843	14,589	8,077	15,603	8,669
Do.....	do.....	do.....	do.....	1,229	3.42	18.05	75.57	6.38	.58	14,108	7,768	14,514	8,063	15,563	8,644
Do.....	do.....	do.....	Oct. 18, 1920.....	2,546	2.08	17.88	72.33	9.77	.70	13,639	7,688	14,140	7,856	15,539	8,644
Do.....	do.....	do.....	Oct. 26, 1920.....	2,180	2.71	18.02	71.06	11.95	.60	13,248	7,860	13,738	7,643	15,613	8,674
Do.....	do.....	do.....	Nov. 20, 1920.....	2,180	3.92	18.01	70.98	9.68	.60	13,492	7,896	14,042	7,801	15,590	8,661
Do.....	do.....	do.....	do.....	2,333	3.32	18.52	72.80	8.68	.78	13,525	7,681	14,300	7,944	15,669	8,669
Do.....	do.....	do.....	Dec. 3, 1920.....	2,133	2.22	18.77	71.57	10.66	.63	13,508	7,504	13,942	7,745	15,587	8,632
Do.....	do.....	do.....	Dec. 10, 1920.....	1,533	2.22	18.02	72.01	10.97	.63	13,526	7,514	13,833	7,685	15,577	8,632
Do.....	do.....	do.....	Dec. 21, 1920.....	2,005	2.83	17.86	72.33	9.81	.60	13,668	7,500	14,066	7,014	15,596	8,664
Do.....	do.....	do.....	do.....	2,005	3.51	17.86	69.74	11.76	.86	13,413	7,452	13,743	7,635	15,575	8,653
Do.....	do.....	do.....	Dec. 30, 1920.....	2,005	2.40	18.50	70.82	9.98	.62	13,275	7,375	13,759	7,644	15,658	8,649
Do.....	do.....	do.....	do.....	1,860	3.52	17.36	70.86	11.62	.62	13,275	7,375	13,759	7,644	15,658	8,649
Do.....	do.....	do.....	do.....	1,860	2.85	16.68	70.86	12.46	.63	13,276	7,376	13,665	7,592	15,610	8,672
Do.....	do.....	do.....	do.....	1,708	3.49	17.38	71.32	11.10	.63	13,413	7,452	13,898	7,721	15,633	8,685
Do.....	do.....	do.....	Jan. 13, 1921.....	1,708	3.62	19.11	70.31	10.58	.62	13,559	7,533	14,068	7,816	15,732	8,740
Do.....	do.....	do.....	do.....	2,074	2.27	18.25	70.95	10.80	.81	13,629	7,572	13,946	7,748	15,634	8,686
Do.....	do.....	do.....	Jan. 31, 1921.....	2,074	2.11	18.79	70.12	11.09	.85	13,554	7,530	13,846	7,692	15,573	8,652
Do.....	do.....	do.....	do.....	1,399	2.80	17.87	71.36	10.67	.74	13,555	7,530	13,945	7,747	15,611	8,673
Do.....	do.....	do.....	Feb. 7, 1921.....	2,005	3.32	18.08	71.25	10.61	.89	13,613	7,563	14,004	7,782	15,680	8,711
Do.....	do.....	do.....	Feb. 10, 1921.....	2,005	3.32	18.16	71.23	10.61	.89	13,539	7,569	14,004	7,780	15,668	8,703
Do.....	do.....	do.....	do.....	2,005	3.69	19.52	70.68	9.80	.66	13,624	7,569	14,146	7,859	15,688	8,713
Do.....	do.....	do.....	do.....	2,005	4.38	18.24	69.58	12.18	.71	13,105	7,281	13,705	7,614	15,608	8,670
Do.....	do.....	do.....	do.....	2,005	3.69	18.41	71.53	10.06	.69	13,519	7,511	14,037	7,798	15,607	8,671
Do.....	do.....	do.....	do.....	2,005	4.09	18.69	70.53	10.88	.74	13,390	7,439	13,961	7,756	15,665	8,703

Do. ....do. ....do.	Feb. 19, 1921	1,928	2.71	17.39	71.58	11.03	71	13,534	7,519	13,911	7,728	8,687
Do. ....do. ....do.	.....do.	1,928	3.34	17.81	71.63	10.56	.74	13,533	7,518	14,001	7,778	8,697
Do. ....do. ....do.	.....do.	1,928	3.56	17.45	71.69	11.99	.79	13,267	7,371	13,757	7,643	8,684
Do. ....do. ....do.	Mar. 17, 1921	1,806	2.62	17.70	71.09	11.21	.59	13,577	7,543	13,942	7,745	8,723
Do. ....do. ....do.	.....do.	1,806	2.56	17.82	72.43	9.65	.66	13,768	7,649	14,130	7,850	8,688
Do. ....do. ....do.	.....do.	1,806	2.06	18.02	71.68	10.30	.76	13,764	7,647	14,053	7,807	8,704
Do. ....do. ....do.	Mar. 21, 1921	1,498	2.53	19.21	71.04	9.75	.66	13,824	7,680	14,183	7,879	8,731
Do. ....do. ....do.	.....do.	1,498	2.42	18.61	69.35	12.04	.66	13,398	7,443	13,730	7,628	8,672
Average for above 37 analyses, Pool No. 2, Lamberts Point, fiscal year 1921 . . .												
Panama Canal												
Norfolk, Va. ....do. ....do.												
Do. ....do. ....do.	Oct. 17, 1917	1,833	3.20	17.70	75.30	7.00	0.75	14,090	7,828	14,560	8,089	8,700
Do. ....do. ....do.	.....do.	1,833	2.90	16.90	74.50	8.60	.75	13,910	7,728	14,380	8,089	8,711
Do. ....do. ....do.	.....do.	1,833	2.80	17.50	76.60	5.90	.80	14,340	7,967	14,760	8,200	8,711
Do. ....do. ....do.	.....do.	608	2.70	18.10	75.10	6.80	1.00	14,240	7,911	14,630	8,128	8,722
Do. ....do. ....do.	.....do.	608	2.60	17.40	73.00	9.60	.90	13,780	7,656	14,140	7,856	8,695
Do. ....do. ....do.	Nov. 23, 1917	1,960	2.90	17.80	74.80	7.40	.85	14,090	7,828	14,520	8,067	8,711
Do. ....do. ....do.	.....do.	1,960	2.40	16.90	73.80	9.30	.85	13,810	7,672	14,150	7,861	8,667
Do. ....do. ....do.	.....do.	1,659	3.10	17.60	73.80	8.60	.65	13,870	7,766	14,320	7,956	8,706
Do. ....do. ....do.	Dec. 11, 1917	1,659	3.90	17.40	74.20	8.40	.65	13,780	7,656	14,330	7,961	8,695
Do. ....do. ....do.	.....do.	1,659	3.00	17.70	73.80	8.50	.70	13,910	7,728	14,350	7,972	8,717
Do. ....do. ....do.	.....do.	1,659	3.80	17.20	73.20	9.60	.90	13,670	7,594	14,200	7,889	8,728
Do. ....do. ....do.	.....do.	1,659	3.40	16.60	74.40	8.20	.60	13,720	7,622	14,200	7,889	8,667
Do. ....do. ....do.	.....do.	1,659	3.50	17.40	74.40	8.20	.75	13,830	7,667	14,330	7,961	8,672
Do. ....do. ....do.	.....do.	1,659	5.50	16.90	76.40	6.70	.95	13,800	7,667	14,610	8,117	8,700
Do. ....do. ....do.	.....do.	1,659	3.60	17.40	75.40	7.20	.75	14,040	7,900	14,560	8,089	8,717
Do. ....do. ....do.	Mar. 8, 1918	882	3.10	18.40	73.80	6.90	.80	14,070	7,817	14,550	8,083	8,683
Do. ....do. ....do.	.....do.	882	3.10	18.40	73.80	6.90	.80	14,070	7,817	14,550	8,083	8,683
Do. ....do. ....do.	.....do.	882	3.60	17.20	76.10	6.70	.80	14,090	7,828	14,430	8,017	8,695
Do. ....do. ....do.	.....do.	882	2.80	18.20	76.60	5.20	.80	14,500	8,056	14,920	8,289	8,744
Do. ....do. ....do.	.....do.	882	2.80	16.70	76.60	6.80	.45	14,080	7,822	14,450	8,028	8,611
Do. ....do. ....do.	Mar. 20, 1918	1,381	3.00	17.10	76.10	8.00	.55	13,980	7,767	14,400	8,067	8,656
Do. ....do. ....do.	.....do.	1,381	2.90	18.70	74.30	7.00	.55	13,980	7,767	14,400	8,000	8,606
Do. ....do. ....do.	.....do.	1,381	3.20	17.70	75.10	7.20	.55	13,980	7,767	14,450	8,028	8,656
Do. ....do. ....do.	.....do.	1,381	3.40	16.50	73.90	9.60	.75	13,590	7,650	14,060	7,811	8,672
Do. ....do. ....do.	June 1, 1918	1,342	3.40	16.50	73.90	9.60	.75	13,650	7,653	14,130	7,853	8,683
Do. ....do. ....do.	.....do.	1,342	3.30	16.60	74.80	8.60	.65	13,810	7,672	14,270	7,928	8,672
Do. ....do. ....do.	.....do.	1,342	3.00	16.80	75.30	7.90	.62	13,950	7,750	14,380	7,989	8,672
Do. ....do. ....do.	.....do.	1,629	4.20	16.60	74.70	8.70	.50	13,860	7,583	14,240	7,911	8,661
Do. ....do. ....do.	June 28, 1918	1,629	3.80	17.30	75.60	7.10	.60	13,920	7,533	14,460	8,033	8,644
Do. ....do. ....do.	.....do.	1,629	4.20	17.10	74.90	8.00	.85	13,700	7,611	14,290	7,939	8,633
Do. ....do. ....do.	.....do.	1,629	3.80	16.90	76.70	6.40	.70	14,030	7,794	14,580	8,100	8,656
Average for above 31 analyses, Pool No. 2, Sewalls Point, fiscal year 1918.												
Panama Canal												
Norfolk, Va. ....do. ....do.												
Do. ....do. ....do.	Sept. 16, 1918	935	2.50	17.80	76.20	6.00	.50	14,350	7,972	14,720	8,178	8,700
Do. ....do. ....do.	.....do.	935	2.20	17.60	76.20	6.20	.60	14,360	7,978	14,680	8,158	8,695
Do. ....do. ....do.	.....do.	935	2.30	17.30	75.30	7.40	.62	14,080	7,822	14,490	8,011	8,650
Do. ....do. ....do.	Sept. 21, 1918	672	3.30	17.60	75.20	7.20	.66	14,030	7,794	14,520	8,067	8,695
Do. ....do. ....do.	.....do.	672	3.30	17.30	75.50	7.30	.60	14,030	7,806	14,530	8,072	8,711
Do. ....do. ....do.	.....do.	672	3.10	17.10	76.10	6.80	.60	14,190	7,883	14,530	8,139	8,733
Do. ....do. ....do.	Sept. 23, 1918	974	2.90	18.10	75.70	6.20	1.15	14,240	7,911	14,670	8,130	8,689

TABLE 2.—Analyses of pool coal, Atlantic shipping ports—Continued.
POOL NO. 2, RUN-OF-MINE COAL—Continued.

Consignee.	Port of loading.	Pier.	Date.	Tons delivered.	Proximate analyses.					Calorific value, per pound.						Moisture-free and ash-free.
					As received.	Dry coal.			As received.		Dry coal.		Moisture-free and ash-free.			
						Volatiles, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.	B. t. u.	Calories.	B. t. u.	Calories.	
6	7	8	9	10	11	12	13	14	15	16						
Panama Canal	Norfolk, Va.	Sewalls Point.	Sept. 23, 1918	974	3.40	17.50	75.80	6.70	0.65	14,030	7,794	14,520	8,067	15,560	8,644	
Do.	do.	do.	do.	974	3.20	16.90	74.40	8.70	.65	13,870	7,706	14,330	7,961	15,690	8,717	
Do.	do.	do.	do.	974	3.30	17.20	74.80	8.00	.65	13,920	7,733	14,300	7,994	15,650	8,695	
Do.	do.	do.	Sept. 25, 1918	1,592	2.50	17.30	75.00	7.70	.72	14,110	7,839	14,470	8,039	15,680	8,713	
Do.	do.	do.	do.	1,592	2.60	17.60	74.80	7.60	.65	14,050	7,806	14,430	8,011	15,610	8,672	
Do.	do.	do.	do.	1,592	2.70	17.10	75.90	7.00	.60	14,190	7,847	14,530	8,072	15,630	8,683	
Do.	do.	do.	do.	1,592	2.40	18.00	74.70	7.30	.70	14,160	7,857	14,510	8,061	15,660	8,706	
Do.	do.	do.	do.	1,592	2.10	19.00	74.30	6.70	.82	14,230	7,856	14,620	8,122	15,670	8,706	
Do.	do.	do.	do.	1,592	2.10	18.50	76.10	6.00	.65	14,420	8,011	14,780	8,194	15,700	8,722	
Do.	do.	do.	do.	1,596	2.70	17.50	73.30	7.20	.80	14,450	8,025	14,760	8,200	15,680	8,706	
Do.	do.	do.	Feb. 3, 1919	596	2.10	17.30	74.80	7.90	.90	14,160	7,877	14,560	8,083	15,680	8,711	
Do.	do.	do.	do.	596	2.10	17.60	74.40	7.40	.80	13,940	7,744	14,380	7,989	15,610	8,672	
Do.	do.	do.	Feb. 4, 1919	1,756	3.20	18.00	74.40	6.00	.65	13,940	7,733	14,400	8,000	15,650	8,695	
Do.	do.	do.	do.	1,756	3.30	18.20	75.10	6.70	.70	14,180	7,878	14,630	8,128	15,690	8,717	
Do.	do.	do.	do.	1,521	2.30	16.40	74.30	9.30	.70	14,030	7,794	14,360	7,978	15,840	8,800	
Do.	do.	do.	do.	521	2.00	17.30	73.40	9.30	.75	13,900	7,722	14,190	7,883	15,650	8,695	
Average for above 24 analyses, Pool No. 2, Sewalls Point, fiscal year 1919.				27,363	2.75	17.58	75.14	7.28	.68	14,117	7,843	14,516	8,064	15,656	8,898	
Panama Canal	Norfolk, Va.	Sewalls Point.	Mar. 24, 1920	737	2.80	18.60	74.00	7.40	1.05	14,040	7,800	14,440	8,022	15,600	8,667	
Do.	do.	do.	do.	1,177	2.90	17.60	73.90	8.30	1.25	13,840	7,698	14,250	7,917	15,540	8,633	
Do.	do.	do.	Apr. 20, 1920	1,177	2.80	17.60	75.50	6.90	.80	14,200	7,889	14,620	8,122	15,700	8,732	
Do.	do.	do.	June 20, 1920	1,654	3.45	17.59	75.51	6.90	.60	14,011	7,784	14,512	8,062	15,588	8,660	
Do.	do.	do.	do.	1,654	3.41	18.69	74.72	6.59	.79	14,312	7,951	14,517	8,065	15,541	8,634	
Do.	do.	do.	do.	1,654	3.98	18.55	74.16	7.29	.85	13,860	7,700	14,436	8,020	15,571	8,651	
Do.	do.	do.	do.	1,654	3.41	18.47	74.00	7.53	.83	13,883	7,713	14,373	7,985	15,543	8,635	
Average for 7 analyses, Pool No. 2, Sewalls Point, fiscal year 1920.				9,267	2.96	18.19	74.54	7.27	.89	14,022	7,760	14,450	8,028	15,583	8,657	

TABLE 2.—Analyses of pool coal, Atlantic shipping ports—Continued.
POOL NO. 2, RUN-OF-MINE COAL—Continued.

Consignee.	Port of loading.	Pier.	Date.	Tons delivered.	Proximate analyses.				Calorific value, per pound.							
					As received.	Dry coal.			As received.		Dry coal.		Moisture-free and ash-free.			
						Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calorific.	B. t. u.	Calorific.	B. t. u.	Calorific.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Panama Canal	Newport News, Va.	C. & O.	May 31, 1918	1,316	3.20	23.60	70.00	6.40	0.75	14,020	7,789	14,480	8,044	15,470	8,594	
Do.	do.	do.	do.	1,316	3.80	21.20	70.70	8.10	.55	13,720	7,622	14,260	7,922	15,520	8,622	
Do.	do.	do.	do.	1,316	3.70	21.50	69.80	8.70	.60	13,600	7,556	14,130	7,850	15,480	8,600	
Do.	do.	do.	June 4, 1918	1,242	3.20	23.50	69.70	6.80	.65	14,060	7,811	14,530	8,072	15,990	8,661	
Do.	do.	do.	do.	1,242	2.40	27.50	66.50	6.00	.55	14,190	7,883	14,540	8,078	15,470	8,594	
Do.	do.	do.	do.	1,242	1.60	20.90	72.50	6.60	.60	14,420	8,011	14,650	8,139	15,680	8,711	
Do.	do.	do.	do.	1,242	2.10	22.20	71.90	5.90	.75	14,360	7,978	14,670	8,150	15,590	8,661	
Average for above 19 analyses, Pool No. 2, C. & O., fiscal year 1918.....				27,453	3.19	23.09	70.32	6.59	.66	14,060	7,811	14,523	8,068	15,548	8,638	
Panama Canal	Newport News.	C. & O.	July 8, 1918	1,027	2.90	25.10	69.50	5.40	0.60	14,190	7,883	14,620	8,122	15,450	8,583	
Do.	do.	do.	do.	1,027	3.20	24.90	70.20	4.90	0.60	14,240	7,911	14,720	8,178	15,480	8,600	
Do.	do.	do.	do.	1,027	4.80	20.00	71.10	8.90	1.00	13,340	7,411	14,010	7,783	15,380	8,544	
Do.	do.	do.	Sept. 26, 1918	951	2.60	22.80	69.90	7.30	.85	14,050	7,806	14,420	8,011	15,560	8,644	
Do.	do.	do.	do.	951	2.90	24.30	70.70	5.90	.55	14,340	7,967	14,770	8,206	15,550	8,639	
Do.	do.	do.	do.	951	2.90	29.60	62.50	7.00	.95	13,730	7,628	14,130	7,850	15,340	8,522	
Do.	do.	do.	Oct. 25, 1918	797	3.30	22.50	72.10	5.40	1.05	13,460	8,033	14,790	8,217	15,630	8,683	
Do.	do.	do.	do.	797	3.60	23.00	70.30	6.70	1.00	13,910	7,728	14,430	8,017	15,470	8,594	
Do.	do.	do.	do.	797	2.70	22.40	71.20	6.40	.70	14,200	7,889	14,590	8,106	15,590	8,661	
Do.	do.	do.	do.	797	2.20	23.20	72.00	6.80	.80	14,250	7,917	14,720	8,178	15,460	8,589	
Do.	do.	do.	Mar. 18, 1919	831	3.20	21.60	70.70	7.70	.85	13,960	7,756	14,420	8,011	15,620	8,678	
Do.	do.	do.	do.	831	3.60	23.00	72.70	4.30	.95	14,390	7,994	14,930	8,294	15,600	8,667	
Do.	do.	do.	Apr. 30, 1919	588	3.10	22.50	70.60	6.90	.80	14,150	7,861	14,600	8,111	15,690	8,717	
Do.	do.	do.	do.	588	3.20	24.20	70.30	5.50	.85	14,340	7,967	14,810	8,228	15,670	8,706	
Average for above 14 analyses, Pool No. 2, C. & O., fiscal year 1919.....				11,920	3.16	23.51	70.27	6.22	.81	14,109	7,838	14,569	8,094	15,535	8,631	
Average of analyses of all Pool No. 2 coal sampled; total tonnage 879,433 tons; average for 422 analyses.....				2.77	18.40	73.05	8.55	.65	13,914	7,730	14,310	7,980	15,648	8,693		

POOL NO. 4 (2-P), RUN-OF-MINE COAL.

Panama Canal.....	Norfolk, Va.....	Sewalls Point.....	Oct. 15, 1919.....	900.....	2.50.....	17.00.....	72.80.....	10.20.....	0.80.....	13,640.....	7,578.....	13,990.....	7,772.....	15,580.....	8,656.....
Do.....	do.....	do.....	do.....	900.....	2.80.....	17.20.....	74.20.....	8.80.....	0.73.....	13,790.....	7,661.....	13,990.....	7,878.....	15,550.....	8,639.....
Do.....	do.....	do.....	do.....	900.....	2.80.....	17.20.....	72.70.....	10.10.....	0.75.....	13,600.....	7,556.....	14,000.....	7,778.....	15,570.....	8,650.....
Do.....	do.....	do.....	Oct. 18, 1919.....	899.....	2.20.....	16.60.....	71.40.....	12.00.....	0.70.....	13,410.....	7,450.....	13,710.....	7,617.....	15,580.....	8,656.....
Do.....	do.....	do.....	do.....	899.....	2.20.....	16.80.....	72.80.....	10.40.....	0.75.....	13,640.....	7,578.....	13,960.....	7,756.....	15,570.....	8,650.....
Do.....	do.....	do.....	do.....	899.....	2.20.....	16.70.....	72.40.....	10.90.....	0.75.....	13,540.....	7,522.....	13,840.....	7,689.....	15,530.....	8,628.....
Do.....	do.....	do.....	Nov. 1, 1919.....	977.....	2.30.....	17.40.....	71.50.....	11.10.....	0.85.....	13,600.....	7,556.....	13,920.....	7,733.....	15,660.....	8,700.....
Do.....	do.....	do.....	do.....	977.....	1.90.....	17.30.....	73.30.....	9.40.....	0.85.....	13,930.....	7,739.....	14,200.....	7,889.....	15,670.....	8,706.....
Do.....	do.....	do.....	do.....	977.....	2.30.....	16.40.....	72.20.....	11.40.....	0.65.....	13,440.....	7,467.....	13,760.....	7,644.....	15,530.....	8,628.....
Do.....	do.....	do.....	Nov. 7, 1919.....	916.....	2.30.....	16.30.....	75.30.....	8.70.....	0.65.....	13,990.....	7,772.....	14,320.....	7,956.....	15,680.....	8,711.....
Do.....	do.....	do.....	do.....	916.....	1.90.....	16.50.....	74.80.....	8.90.....	0.70.....	13,970.....	7,761.....	14,240.....	7,911.....	15,630.....	8,683.....
Do.....	do.....	do.....	do.....	916.....	1.90.....	16.70.....	73.10.....	10.40.....	0.75.....	13,790.....	7,622.....	13,980.....	7,767.....	15,600.....	8,667.....
Do.....	do.....	do.....	Nov. 13, 1919.....	832.....	2.30.....	16.20.....	72.30.....	11.00.....	0.75.....	13,500.....	7,500.....	13,810.....	7,672.....	15,520.....	8,622.....
Do.....	do.....	do.....	do.....	832.....	2.30.....	16.20.....	72.40.....	11.40.....	0.70.....	13,480.....	7,489.....	13,800.....	7,667.....	15,570.....	8,650.....
Do.....	do.....	do.....	do.....	832.....	2.30.....	16.40.....	73.60.....	10.00.....	0.70.....	13,760.....	7,644.....	14,080.....	7,822.....	15,650.....	8,695.....
Do.....	do.....	do.....	Dec. 30, 1919.....	827.....	1.70.....	16.30.....	74.10.....	9.60.....	0.75.....	13,910.....	7,728.....	14,180.....	7,878.....	15,680.....	8,711.....
Do.....	do.....	do.....	do.....	827.....	1.70.....	16.00.....	71.80.....	12.20.....	0.70.....	13,500.....	7,500.....	13,730.....	7,628.....	15,640.....	8,659.....
Do.....	do.....	do.....	do.....	827.....	1.50.....	16.20.....	72.40.....	11.20.....	0.76.....	13,640.....	7,578.....	13,840.....	7,689.....	15,620.....	8,678.....
Do.....	do.....	do.....	Mar. 21, 1920.....	888.....	2.00.....	16.40.....	73.40.....	10.40.....	0.70.....	13,730.....	7,622.....	14,000.....	7,778.....	15,690.....	8,661.....
Do.....	do.....	do.....	do.....	888.....	1.80.....	16.60.....	72.90.....	12.50.....	0.70.....	13,360.....	7,422.....	13,610.....	7,561.....	15,560.....	8,644.....
Do.....	do.....	do.....	do.....	888.....	2.10.....	16.60.....	70.90.....	10.50.....	0.70.....	13,650.....	7,583.....	13,950.....	7,750.....	15,590.....	8,661.....
Do.....	do.....	do.....	Mar. 24, 1920.....	711.....	2.10.....	17.00.....	74.20.....	8.80.....	0.70.....	13,980.....	7,754.....	14,280.....	7,922.....	15,630.....	8,683.....
Do.....	do.....	do.....	do.....	711.....	2.20.....	16.50.....	74.30.....	9.20.....	0.70.....	13,530.....	7,694.....	14,160.....	7,867.....	15,590.....	8,661.....
Do.....	do.....	do.....	Apr. 20, 1920.....	1,203.....	2.00.....	19.80.....	74.90.....	5.30.....	0.90.....	14,440.....	8,022.....	14,740.....	8,189.....	15,570.....	8,650.....
Average for above 24 analyses, Pool No. 4 (2-P), Sewalls Point, fiscal year 1920.....										13,710.....	7,617.....	14,011.....	7,784.....	15,599.....	8,666.....
Panama Canal.....	Norfolk, Va.....	Sewalls Point.....	July 6, 1920.....	1,939.....	2.54.....	19.78.....	74.35.....	5.87.....	0.73.....	14,377.....	7,987.....	14,756.....	8,198.....	15,676.....	8,709.....
Do.....	do.....	do.....	Aug. 30, 1920.....	1,289.....	2.11.....	16.46.....	71.68.....	11.88.....	0.77.....	13,468.....	7,482.....	13,758.....	7,643.....	15,613.....	8,674.....
Do.....	do.....	do.....	Sept. 13, 1920.....	1,485.....	2.19.....	17.32.....	74.53.....	12.38.....	0.69.....	14,089.....	8,227.....	14,415.....	8,008.....	15,660.....	8,704.....
Do.....	do.....	do.....	Oct. 16, 1920.....	2,473.....	2.16.....	17.16.....	70.46.....	7.95.....	0.74.....	13,924.....	7,402.....	13,618.....	7,586.....	15,542.....	8,654.....
Do.....	do.....	do.....	Nov. 4, 1920.....	2,000.....	3.07.....	16.78.....	71.43.....	11.79.....	0.69.....	13,261.....	7,367.....	13,681.....	7,601.....	15,510.....	8,617.....
Do.....	do.....	do.....	do.....	2,000.....	3.11.....	16.73.....	73.29.....	9.98.....	0.69.....	13,583.....	7,346.....	14,019.....	7,788.....	15,573.....	8,642.....
Do.....	do.....	do.....	Dec. 10, 1920.....	1,799.....	3.09.....	17.12.....	74.35.....	8.53.....	1.07.....	13,526.....	7,681.....	14,267.....	7,926.....	15,598.....	8,666.....
Average for above 7 analyses, Pool No. 4 (2-P) Sewalls Point, fiscal year 1921.....										13,706.....	7,614.....	14,073.....	7,818.....	15,597.....	8,665.....
Average of analyses of all Pool No. 4 (2-P) coal sampled; total tonnage 34,627 tons; average for 31 analyses.....										13,709.....	7,616.....	14,025.....	7,792.....	15,599.....	8,666.....

POOL NO. 5, RUN-OF-MINE COAL.

Switzerland.....	Norfolk, Va.....	Lamberts Point.....	Apr. 10, 1920.....	786.....	2.70.....	33.90.....	57.90.....	8.20.....	1.70.....	13,600.....	7,576.....	13,980.....	7,767.....	15,250.....	8,461.....
Do.....	do.....	do.....	do.....	786.....	2.50.....	33.20.....	56.60.....	10.20.....	1.55.....	13,450.....	7,452.....	13,790.....	7,661.....	15,350.....	8,528.....
Do.....	do.....	do.....	do.....	786.....	2.40.....	33.10.....	55.80.....	11.10.....	1.50.....	13,300.....	7,389.....	13,630.....	7,572.....	15,390.....	8,522.....
Do.....	do.....	do.....	do.....	786.....	2.60.....	33.70.....	56.20.....	10.10.....	1.50.....	13,480.....	7,489.....	13,840.....	7,689.....	15,390.....	8,550.....
Do.....	do.....	do.....	Nov. 1, 1920.....	2,035.....	3.56.....	32.42.....	54.66.....	12.92.....	1.03.....	12,787.....	7,104.....	13,259.....	7,366.....	15,227.....	8,459.....

TABLE 2.—Analyses of pool coal, Atlantic shipping ports—Continued.
POOL NO. 5, RUN-OF-MINE COAL—Continued.

Consignee.	Port of loading.	Pier.	Date.	Tons delivered.	Proximate analyses.					Caloric value, per pound.					
					As received.	Dry coal.			As received.		Dry coal.		Moisture-free and ash-free.		
						Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calo-ries.	B. t. u.	Calo-ries.	B. t. u.	Calo-ries.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Switzerland.....	Norfolk, Va.....	Lamberts Point.....	Nov. 5, 1920.....	1,951	3.00	31.26	56.78	11.96	0.72	12,861	7,145	13,259	7,366	15,060	8,367
Do.....	do.....	do.....	do.....	1,951	3.20	33.14	55.96	10.90	.78	12,861	7,145	13,286	7,381	14,911	8,284
Do.....	do.....	do.....	Nov. 10, 1920.....	2,135	2.59	34.60	54.87	10.53	.84	13,244	7,358	13,596	7,553	15,196	8,442
Do.....	do.....	do.....	do.....	2,135	2.85	35.47	54.18	10.35	.90	13,146	7,303	13,532	7,518	15,094	8,386
Do.....	do.....	do.....	do.....	1,708	2.67	33.35	55.24	11.41	.83	13,105	7,281	13,465	7,481	15,196	8,444
Do.....	do.....	do.....	Nov. 13, 1920.....	1,708	2.47	31.55	56.68	11.77	.85	13,171	7,317	13,505	7,503	15,307	8,504
Do.....	do.....	do.....	do.....	1,708	2.76	33.68	55.20	11.12	1.00	13,063	7,257	13,434	7,463	15,115	8,397
Do.....	do.....	do.....	do.....	1,708	3.23	33.62	57.04	9.34	1.34	13,362	7,423	13,808	7,671	15,230	8,461
Average for above 13 analyses, Pool No. 5, Lamberts Point, fiscal years 1920 and 1921.				20,610	2.81	33.31	55.92	10.77	1.08	13,187	7,326	13,568	7,538	15,206	8,448
Switzerland.....	Newport News, Va....	C. & O.....	Aug. 14, 1919.....	847	4.90	31.90	56.10	12.10	0.80	12,640	7,022	13,300	7,339	15,130	8,406
Do.....	do.....	do.....	do.....	847	5.00	34.00	57.20	7.90	.70	13,260	7,367	13,950	7,750	15,130	8,417
Do.....	do.....	do.....	do.....	855	4.70	33.50	58.30	8.20	.90	13,240	7,356	13,800	7,717	15,150	8,417
Do.....	do.....	do.....	Aug. 25, 1919.....	855	3.20	33.00	58.30	8.20	1.35	13,500	7,500	13,950	7,750	15,190	8,439
Do.....	do.....	do.....	do.....	855	2.30	34.60	56.70	8.70	1.65	13,560	7,533	13,870	7,706	15,190	8,439
Do.....	do.....	do.....	do.....	869	2.00	34.00	58.50	7.50	1.15	13,820	7,678	14,100	7,833	15,230	8,459
Do.....	do.....	do.....	Sept. 12, 1919.....	869	1.50	30.30	62.60	6.60	1.45	14,200	7,889	14,420	8,111	15,440	8,578
Do.....	do.....	do.....	do.....	869	1.70	32.00	57.00	10.70	1.40	13,320	7,594	13,560	7,583	15,240	8,439
Do.....	do.....	do.....	do.....	869	2.20	36.00	56.60	7.40	1.20	13,320	7,594	13,560	7,583	15,100	8,389
Do.....	do.....	do.....	Sept. 23, 1919.....	1,110	2.60	33.20	58.20	8.60	1.10	13,670	7,696	13,980	7,661	15,060	8,383
Do.....	do.....	do.....	do.....	1,110	2.70	33.20	57.20	8.90	1.25	13,430	7,467	13,780	7,667	15,150	8,417
Do.....	do.....	do.....	do.....	1,110	2.70	34.30	57.40	8.30	1.25	13,530	7,517	13,900	7,622	15,160	8,422
Do.....	do.....	do.....	Sept. 24, 1919.....	1,255	2.40	32.50	58.50	9.20	.75	13,480	7,489	13,900	7,672	15,210	8,450
Do.....	do.....	do.....	do.....	1,255	2.20	33.70	57.80	8.50	.80	13,590	7,550	13,900	7,753	15,190	8,439
Do.....	do.....	do.....	do.....	1,255	2.50	33.60	58.50	7.90	.80	13,660	7,589	14,010	7,783	15,210	8,450
Do.....	do.....	do.....	do.....	1,255	2.50	32.90	58.10	9.00	.70	13,440	7,467	13,780	7,661	15,160	8,422
Do.....	do.....	do.....	Oct. 23, 1919.....	835	2.70	32.40	58.00	9.60	1.25	13,340	7,411	13,710	7,617	15,160	8,422
Do.....	do.....	do.....	do.....	835	3.10	33.20	56.10	10.70	1.15	13,070	7,261	13,490	7,494	15,110	8,394

TABLE 2.—Analyses of pool coal, Atlantic shipping ports—Continued.
POOL NO. 5, RUN-OF-MINE COAL—Continued.

Consignee.	Port of loading.	Pier.	Date.	Tons deliv-ered.	Proximate analyses.										Caloric value, per pound.			
					As re-ceived.	Dry coal.			As re-ceived.		Dry coal.		Moisture-free and ash-free.					
						Volat-ile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sul-phur, per cent.	B. t. u.	Calo-ries.	B. t. u.	Calo-ries.	B. t. u.	Calo-ries.			
1	2	8	4	5	6	7	8	9	10	11	12	13	14	15	16			
Holland.....	Newport News, Va...	C. & O.	Aug. 27, 1920	1,795	2.83	34.71	57.81	7.48	1.17	13,708	7,616	14,107	7,837	15,248	8,471			
Do.....	do.....	do.....	do.....	1,795	3.44	34.15	56.65	9.20	0.88	13,372	7,429	13,848	7,693	15,251	8,473			
Do.....	do.....	do.....	do.....	1,795	4.25	33.38	56.55	10.07	1.00	13,047	7,248	13,626	7,570	15,159	8,418			
Do.....	do.....	do.....	Sept. 17, 1920	2,111	2.51	35.26	57.92	6.82	0.76	13,833	7,685	14,189	8,783	15,227	8,459			
Do.....	do.....	do.....	Sept. 28, 1920	1,647	2.63	34.99	56.97	8.04	1.14	13,569	7,538	13,936	7,742	15,155	8,419			
Do.....	do.....	do.....	do.....	1,647	3.01	33.65	55.58	10.77	0.90	13,055	7,253	13,460	7,478	15,083	8,381			
Do.....	do.....	do.....	do.....	1,647	2.96	34.59	57.14	8.27	0.83	13,547	7,526	13,960	7,756	15,210	8,454			
Do.....	do.....	do.....	Sept. 29, 1920	2,274	3.92	34.36	57.84	7.67	1.40	13,418	7,454	13,965	7,758	15,246	8,414			
Do.....	do.....	do.....	do.....	2,274	5.30	33.96	57.37	8.67	1.15	13,148	7,304	13,884	7,713	15,202	8,446			
Do.....	do.....	do.....	do.....	2,274	4.49	33.38	58.63	7.98	1.07	13,393	7,391	13,991	7,437	15,239	8,466			
Do.....	do.....	do.....	do.....	1,397	3.05	33.32	56.08	10.71	1.20	12,970	7,211	13,357	7,434	15,093	8,398			
Do.....	do.....	do.....	Oct. 2, 1920	1,397	1.89	34.32	55.39	10.28	1.49	13,460	7,302	13,551	7,531	15,122	8,401			
Do.....	do.....	do.....	Oct. 30, 1920	1,397	2.22	33.34	54.98	9.68	1.20	13,345	7,359	13,658	7,588	15,122	8,401			
Do.....	do.....	do.....	do.....	1,397	2.61	33.40	54.93	8.65	1.20	13,345	7,359	13,658	7,588	15,122	8,401			
Do.....	do.....	do.....	do.....	1,397	2.61	33.40	54.93	8.65	1.20	13,345	7,359	13,658	7,588	15,122	8,401			
Do.....	do.....	do.....	Nov. 6, 1920	1,758	2.18	33.16	58.25	8.59	0.87	13,602	7,557	13,956	7,972	15,085	8,381			
Do.....	do.....	do.....	do.....	1,758	3.18	33.05	57.61	8.28	1.01	13,408	7,489	13,848	7,962	15,092	8,384			
Do.....	do.....	do.....	do.....	1,758	3.39	32.95	57.58	8.99	1.01	13,408	7,520	13,638	7,977	15,132	8,418			
Do.....	do.....	do.....	Nov. 24, 1920	1,289	3.39	32.97	56.08	10.95	1.10	12,997	7,221	13,425	7,438	15,076	8,370			
Do.....	do.....	do.....	do.....	1,289	2.82	34.43	57.26	8.31	1.10	13,551	7,517	13,924	7,736	15,186	8,437			
Do.....	do.....	do.....	do.....	1,289	2.56	33.08	57.328	9.54	1.10	13,328	7,494	13,785	7,631	15,182	8,434			
Do.....	do.....	do.....	do.....	1,289	2.56	33.08	57.328	9.54	1.12	13,344	7,415	13,700	7,611	15,195	8,442			
Do.....	do.....	do.....	Dec. 13, 1920	1,441	3.10	32.45	58.83	8.72	0.89	13,444	7,469	13,874	7,643	15,199	8,444			
Do.....	do.....	do.....	do.....	1,441	2.53	33.39	57.05	9.56	1.49	13,409	7,449	13,757	7,608	15,211	8,451			
Average for above 93 analyses, Pool No. 5, C. & O., fiscal years 1920 and 1921..				134,404	2.88	33.38	57.13	9.49	1.11	13,337	7,409	13,732	7,629	15,172	8,429			

POOL NO. 6, RUN-OF-MINE COAL.

Switzerland	Norfolk, Va.	Lamberts Point	Aug. 7, 1919	2.90	32.40	57.60	10.00	0.60	13.450	7.472	13.830	7.683	15.370	8.539
Do.	do.	do.	do.	2.90	32.20	58.40	9.40	.65	13.290	7.383	13.720	7.606	15.110	8.394
Do.	do.	do.	do.	3.00	33.70	58.80	9.50	.65	13.300	7.389	13.690	7.622	15.160	8.422
Do.	do.	do.	do.	3.10	33.10	53.80	11.10	.75	13.100	7.278	13.510	7.506	15.200	8.444
Do.	do.	do.	do.	3.70	34.60	53.90	11.50	1.30	12.960	7.200	13.320	7.400	15.050	8.361
Do.	do.	do.	Aug. 29, 1919	2.80	34.60	54.50	10.90	1.20	13.040	7.244	13.420	7.456	15.060	8.367
Do.	do.	do.	do.	2.50	32.20	53.50	14.30	.75	12.640	7.022	12.960	7.200	15.120	8.400
Do.	do.	do.	do.	2.60	34.00	53.00	14.00	.55	12.310	6.839	12.680	7.044	14.760	8.200
Do.	do.	do.	do.	2.50	34.20	54.30	13.90	.75	12.960	7.200	13.290	7.383	15.430	8.572
Holland	do.	do.	Feb. 10, 1920	2.250	31.20	53.90	17.00	.90	12.510	6.950	12.620	7.178	15.280	8.433
Do.	do.	do.	do.	2.250	31.80	53.50	17.00	.95	12.360	6.867	12.680	7.044	15.180	8.489
Do.	do.	do.	do.	2.250	30.40	53.50	13.10	1.00	13.580	7.989	13.920	7.200	15.270	8.489
Do.	do.	do.	do.	2.90	29.50	54.50	13.10	.90	13.490	7.494	13.720	7.622	15.460	8.589
Switzerland	do.	do.	Apr. 1, 1920	1.081	29.80	58.90	14.30	.95	12.760	7.083	13.080	7.267	15.300	8.500
Do.	do.	do.	do.	1.513	33.08	54.70	14.30	.97	12.661	6.923	13.827	7.126	15.169	8.427
Holland	do.	do.	Dec. 23, 1920	1.513	32.51	51.80	13.69	.85	12.703	6.865	12.771	7.095	15.148	8.416
Do.	do.	do.	do.	1.513	33.89	52.50	13.61	.83	12.703	6.865	12.771	7.095	15.148	8.416
Do.	do.	do.	do.	1.513	33.09	53.09	13.61	1.24	12.303	6.835	12.702	7.057	15.265	8.481
Do.	do.	do.	do.	2.83	32.38	54.41	13.21	.88	12.809	7.116	13.182	7.323	15.188	8.349
Do.	do.	do.	do.	27, 334										8, 438

Average for above 18 analyses, Pool No. 6, Lamberts Point, fiscal years 1920 and 1921.

Switzerland	Newport News, Va.	C. & O.	Aug. 18, 1919	3.80	33.90	53.30	12.80	1.25	12.860	6.989	13.080	7.267	15.000	8.333
Do.	do.	do.	do.	3.70	34.00	56.00	10.00	.90	13.010	7.228	13.510	7.506	15.010	8.339
Do.	do.	do.	do.	1.117	34.20	54.60	12.00	1.00	12.890	7.161	13.390	7.439	15.050	8.361
Do.	do.	do.	do.	3.10	34.70	53.40	11.70	1.20	12.650	7.028	13.170	7.317	14.970	8.317
Do.	do.	do.	do.	3.80	34.60	53.60	11.70	1.20	12.730	7.083	13.160	7.311	14.900	8.278
Do.	do.	do.	do.	3.50	35.30	57.40	7.30	1.20	12.630	7.017	13.160	7.311	14.900	8.289
Do.	do.	do.	do.	3.70	35.30	55.70	11.10	.90	12.870	7.278	13.310	7.394	15.180	8.433
Do.	do.	do.	Aug. 29, 1919	3.20	34.80	55.80	9.40	1.35	13.100	7.278	13.520	7.517	14.940	8.322
Do.	do.	do.	do.	3.00	34.50	56.90	8.60	1.15	13.310	7.394	13.730	7.622	15.010	8.339
Do.	do.	do.	do.	3.40	34.50	56.30	9.80	1.20	13.060	7.256	13.520	7.511	14.980	8.322
Do.	do.	do.	do.	3.00	33.90	53.90	12.20	1.10	12.730	7.072	13.120	7.289	14.940	8.300
Do.	do.	do.	do.	3.40	34.50	53.00	12.50	1.35	12.760	6.961	12.980	7.211	14.940	8.300
Do.	do.	do.	do.	3.40	33.40	54.50	12.10	1.15	12.550	6.861	12.850	7.139	14.900	8.283
Do.	do.	do.	do.	3.90	32.70	53.60	13.80	1.10	12.670	7.039	13.090	7.272	14.900	8.278
Do.	do.	do.	Sept. 25, 1919	3.20	34.20	53.60	12.20	.85	13.710	7.617	14.040	7.800	15.333	8.278
Do.	do.	do.	do.	2.40	36.00	57.60	6.40	.95	13.220	7.344	13.610	7.561	15.020	8.344
Do.	do.	do.	do.	2.90	35.10	55.50	9.40	1.20	12.830	7.128	13.160	7.311	14.920	8.289
Do.	do.	do.	do.	2.10	35.10	53.10	11.10	1.20	12.940	7.189	13.360	7.422	14.870	8.261
Do.	do.	do.	Oct. 10, 1919	3.50	35.60	54.30	10.10	1.20	13.280	7.367	13.660	7.589	14.970	8.317
Do.	do.	do.	do.	3.80	36.90	54.30	8.80	1.40	13.250	7.361	13.090	7.239	14.860	8.256
Do.	do.	do.	do.	3.80	34.50	52.90	12.30	1.40	12.530	6.961	12.900	7.167	14.760	8.200
Do.	do.	do.	do.	3.80	34.20	52.90	12.60	1.15	12.410	6.894	12.460	6.922	14.670	8.150
Do.	do.	do.	do.	3.80	34.20	50.70	15.10	1.15	11.990	6.661	12.680	6.922	14.740	8.189
Do.	do.	do.	do.	4.00	34.80	51.20	14.00	1.60	12.170	6.761	12.610	7.044	14.740	8.189
Do.	do.	do.	do.	3.30	35.90	52.10	12.00	1.55	12.680	7.044	13.110	7.283	14.900	8.278
Do.	do.	do.	do.	2.30	35.60	54.40	10.00	1.30	13.180	7.322	13.490	7.494	14.990	8.328

TABLE 2.—Analyses of pool coal, Atlantic shipping ports—Continued.
POOL NO. 6, RUN-OF-MINE COAL—Continued.

Consignee.	Port of loading.	Pier.	Date.	Tons deliv-ered.	Proximate analyses.										Calorific value, per pound.			
					As re-ceived.		Dry coal.			As re-ceived.		Dry coal.		Moisture-free and ash-free.				
					Mois-ture, per cent.	Volat-ile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sul-phur, per cent.	B. t. u.	Calo-ries.	B. t. u.	Calo-ries.	B. t. u.	Calo-ries.			
6	7	8	9	10	11	12	13	14	15	16								
Switzerland.....	Newport News, Va...	C. & O.....	Jan. 29, 1920	1,739	5.80	33.60	48.90	17.50	0.95	11,560	6,422	12,270	6,817	14,870	8,261			
Do.....	do.....	do.....	do.....	1,739	4.60	32.80	55.20	12.00	1.45	12,510	7,083	13,360	7,422	15,190	8,439			
Holland.....	do.....	do.....	Mar. 15, 1920	1,813	3.10	33.10	56.90	10.00	1.45	13,210	7,339	13,630	7,572	15,140	8,411			
Do.....	do.....	do.....	do.....	1,813	4.00	31.60	54.90	13.50	1.45	12,460	6,922	12,970	7,206	15,000	8,333			
Do.....	do.....	do.....	do.....	1,813	3.30	35.10	56.80	8.10	1.05	13,400	7,444	13,850	7,694	15,070	8,372			
Do.....	do.....	do.....	do.....	1,813	2.70	33.70	54.90	11.40	1.20	13,070	7,261	13,430	7,481	15,150	8,417			
Switzerland.....	do.....	do.....	Mar. 24, 1920	2,018	3.00	34.70	53.60	10.70	1.10	13,050	7,250	13,450	7,472	15,060	8,367			
Do.....	do.....	do.....	do.....	2,018	2.60	34.20	53.50	12.20	1.00	12,650	7,028	13,150	7,306	14,980	8,357			
Do.....	do.....	do.....	do.....	2,018	2.80	34.80	52.80	14.20	1.15	13,440	7,460	13,770	7,650	15,100	8,389			
Do.....	do.....	do.....	Mar. 31, 1920	2,342	2.40	33.40	57.90	8.70	1.00	13,550	7,528	13,880	7,711	15,200	8,444			
Do.....	do.....	do.....	do.....	2,342	3.30	34.00	55.40	10.90	1.45	12,990	7,453	13,420	7,467	15,080	8,378			
Do.....	do.....	do.....	Apr. 3, 1920	1,574	3.40	32.20	52.10	13.70	1.00	12,110	6,728	12,540	6,967	14,870	8,261			
Do.....	do.....	do.....	Apr. 20, 1920	1,574	3.90	32.00	54.00	13.90	1.00	12,410	6,894	12,910	7,172	15,000	8,333			
Do.....	do.....	do.....	do.....	1,574	2.70	32.70	57.40	9.00	1.00	13,190	7,338	13,550	7,628	15,030	8,350			
Do.....	do.....	do.....	Apr. 29, 1920	983	2.00	33.10	57.90	9.00	1.15	13,560	7,533	13,840	7,689	15,210	8,450			
Do.....	do.....	do.....	do.....	983	3.50	33.30	54.50	12.20	1.05	12,660	7,033	13,120	7,289	14,950	8,306			
Do.....	do.....	do.....	May 12, 1920	578	4.70	32.90	53.40	13.70	1.45	12,130	6,739	12,720	7,067	14,740	8,189			
Do.....	do.....	do.....	May 13, 1920	599	4.80	31.50	51.50	15.70	1.30	11,820	6,567	12,420	6,900	14,740	8,189			
Do.....	do.....	do.....	May 14, 1920	1,929	2.50	36.00	55.10	8.90	1.05	13,390	7,439	13,780	7,628	15,070	8,372			
Do.....	do.....	do.....	do.....	1,929	3.40	35.80	54.10	10.10	1.00	12,910	7,172	13,360	7,422	14,860	8,256			
Do.....	do.....	do.....	June 2, 1920	910	2.50	34.00	55.20	10.80	1.00	12,930	7,183	13,260	7,367	14,860	8,256			
Do.....	do.....	do.....	do.....	910	2.60	34.70	56.00	9.30	1.05	13,230	7,350	13,580	7,544	14,970	8,317			
Do.....	do.....	do.....	do.....	910	3.50	34.40	55.00	10.60	1.25	12,860	7,144	13,350	7,406	14,910	8,283			
Do.....	do.....	do.....	do.....	910	3.20	34.30	55.60	10.10	1.20	12,970	7,206	13,390	7,439	14,900	8,278			
Do.....	do.....	do.....	June 7, 1920	1,963	2.50	34.50	57.70	7.80	1.00	13,580	7,544	13,920	7,733	15,090	8,383			
Do.....	do.....	do.....	do.....	1,963	2.50	34.70	57.40	7.90	1.00	13,490	7,494	13,850	7,683	15,020	8,344			
Do.....	do.....	do.....	do.....	1,963	3.60	34.60	55.60	9.80	1.10	12,960	7,200	13,450	7,472	15,020	8,283			

TABLE 2.—Analyses of pool coal, Atlantic shipping ports—Continued.
POOL NO. 7, RUN-OF-MINE COAL—Continued.

Consignee.	Port of loading.	Pier.	Date.	Tons deliv- ered.	Proximate analyses.				Calorific value, per pound.						
					As re- ceived.	Dry coal.			As re- ceived.	Dry coal.					
						Mois- ture, per cent.	Volat- ile matter, per cent.	Fixed carbon, per cent.		Ash, per cent.	Sul- phur, per cent.	B. t. u.	Calo- ries.	Moisture-free and ash-free.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Holland.....	Newport News, Va....	C. & O.....	Feb. 12, 1920	2,072	3.20	31.40	57.90	10.70	0.95	13,160	7,311	13,590	7,550	15,220	8,456
Do.....	do.....	do.....	do.....	2,072	2.50	32.10	58.20	9.70	.90	13,480	7,489	13,830	7,683	15,320	8,511
Do.....	do.....	do.....	do.....	2,072	3.70	33.70	55.40	10.90	.90	12,980	7,211	13,480	7,489	15,130	8,406
Do.....	do.....	do.....	Mar. 12, 1920	1,063	2.30	32.00	59.00	9.00	.80	13,610	7,561	13,940	7,744	15,320	8,511
Do.....	do.....	do.....	do.....	1,063	2.10	33.00	58.30	8.70	.85	13,650	7,583	13,950	7,750	15,280	8,489
Do.....	do.....	do.....	do.....	1,063	2.00	31.80	58.20	10.00	1.20	13,420	7,456	13,690	7,606	15,210	8,450
Do.....	do.....	do.....	do.....	1,063	2.30	32.00	58.10	9.90	1.20	13,450	7,472	13,760	7,644	15,270	8,483
Do.....	do.....	do.....	Mar. 17, 1920	1,886	2.40	34.00	57.00	9.00	.90	13,450	7,472	13,770	7,650	15,130	8,406
Do.....	do.....	do.....	do.....	1,886	2.40	35.40	55.10	9.50	1.40	13,390	7,439	13,720	7,622	15,160	8,422
Do.....	do.....	do.....	do.....	1,886	2.70	32.40	58.90	8.70	.70	13,520	7,511	13,890	7,717	15,210	8,450
Do.....	do.....	do.....	do.....	1,384	3.70	28.70	62.20	9.10	.70	13,400	7,444	13,900	7,722	15,330	8,517
Do.....	do.....	do.....	Mar. 20, 1920	1,384	3.40	32.30	58.70	9.00	.85	13,440	7,467	13,960	7,756	15,360	8,533
Do.....	do.....	do.....	do.....	1,384	3.40	31.90	59.10	9.00	.90	13,380	7,433	13,850	7,694	15,220	8,456
Do.....	do.....	do.....	do.....	776	2.50	31.40	58.10	10.50	.90	13,420	7,456	13,890	7,717	15,260	8,478
Switzerland.....	do.....	do.....	Mar. 24, 1920	3,495	2.70	31.70	55.90	12.40	.80	12,850	7,139	13,210	7,339	15,220	8,456
Holland.....	do.....	do.....	Mar. 27, 1920	3,495	2.00	32.60	58.30	9.10	1.10	13,530	7,517	13,800	7,667	15,080	8,378
Do.....	do.....	do.....	do.....	3,495	2.60	32.20	57.00	10.80	.85	13,160	7,311	13,510	7,506	15,140	8,411
Do.....	do.....	do.....	Mar. 30, 1920	1,578	2.40	30.70	57.20	12.10	1.00	12,970	7,206	13,290	7,383	15,120	8,400
Do.....	do.....	do.....	do.....	1,578	2.00	31.00	57.70	11.30	1.00	13,180	7,322	13,450	7,472	15,150	8,417
Do.....	do.....	do.....	do.....	737	2.20	32.60	54.60	12.80	.85	12,930	7,183	13,220	7,344	15,160	8,417
Do.....	do.....	do.....	Apr. 2, 1920	737	2.60	32.60	59.20	8.60	.75	13,580	7,540	13,940	7,744	15,260	8,478
Do.....	do.....	do.....	do.....	737	2.40	33.20	56.90	9.90	.70	13,330	7,406	13,680	7,589	15,160	8,422
Do.....	do.....	do.....	Apr. 3, 1920	1,088	2.00	33.50	56.50	10.00	.95	13,350	7,417	13,620	7,567	15,130	8,406
Do.....	do.....	do.....	do.....	1,088	2.70	33.60	57.20	9.50	1.20	13,400	7,444	13,690	7,606	15,120	8,400
Do.....	do.....	do.....	do.....	2,748	2.70	33.60	54.90	11.90	1.20	12,990	7,217	13,350	7,417	15,080	8,378
Holland.....	do.....	do.....	Apr. 9, 1920	2,748	3.00	32.00	55.00	14.00	1.15	12,450	6,917	12,920	7,178	15,030	8,328
Do.....	do.....	do.....	do.....	2,748	2.00	32.50	54.10	13.40	.75	12,790	6,067	12,980	7,211	14,990	8,300
Do.....	do.....	do.....	Apr. 11, 1920	1,721	2.20	33.80	54.00	10.20	.90	13,230	7,490	13,630	7,572	15,180	8,433
Do.....	do.....	do.....	do.....	1,721	2.30	32.70	55.20	12.10	.75	13,040	7,244	13,340	7,411	15,170	8,428

TABLE 2.—Analyses of pool coal, Atlantic shipping ports—Continued.
POOL NO. 7, RUN-OF-MINE COAL—Continued.

Consignee.	Port of loading.	Pier.	Date.	Tons delivered.	Proximate analyses.						Calorific value, per pound.					
					As received.			Dry coal.			As received.		Dry coal.		Moisture-free and ash-free.	
					Mois- ture per cent.	Volat- ile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sul- phur, per cent.	B. t. u.	Calo- ries.	B. t. u.	Calo- ries.	B. t. u.	Calo- ries.	B. t. u.	Calo- ries.
6	7	8	9	10	11	12	13	14	15	16						
Holland.....	Newport News, Va.....	C. & O.....	Aug. 11, 1920.....	2,157.....	2.76	32.90	57.81	9.29	0.72	13,371	7,428	13,751	7,639	15,159	8,422	
					2.85	33.96	57.70	8.34	0.90	13,567	7,537	13,965	7,758	15,235	8,464	
					4.09	33.33	54.64	12.03	1.12	12,686	7,048	13,227	7,348	15,038	8,353	
					3.21	34.69	57.54	7.77	1.12	13,583	7,546	14,033	7,796	15,216	8,453	
					2,139	2,139	57.54	11.77	1.70	12,971	7,206	13,291	7,384	15,064	8,389	
					2,506	2,506	52.93	10.04	1.40	13,337	7,409	13,672	7,596	15,198	8,443	
					2,192	2,192	33.76	9.46	1.10	13,412	7,451	13,680	7,606	15,120	8,400	
					2,192	2,192	34.63	8.96	1.10	13,412	7,451	13,680	7,606	15,120	8,400	
					1,985	1,985	33.87	9.47	0.89	13,468	7,482	13,761	7,645	15,140	8,416	
					1,735	1,735	34.18	11.38	0.87	13,114	7,386	13,432	7,473	15,179	8,433	
Switzerland.....	do.....	do.....	Sept. 29, 1920.....	2,157.....	3.76	35.10	58.34	6.56	1.34	13,610	7,561	14,742	7,857	15,439	8,408	
					2.26	34.59	56.67	8.74	1.08	13,428	7,460	13,739	7,633	15,065	8,370	
					1,460	1,460	55.74	8.99	1.28	13,445	7,469	13,712	7,612	15,222	8,457	
					1,460	1,460	55.74	9.99	1.75	13,335	7,408	13,701	7,612	15,222	8,457	
					1,380	1,380	57.02	10.63	1.01	13,249	7,361	13,550	7,528	15,161	8,423	
					928	928	33.30	9.49	0.81	13,279	7,377	13,744	7,636	15,185	8,436	
					728	728	31.45	11.93	0.74	13,061	7,256	13,479	7,488	15,305	8,503	
					728	728	32.89	9.80	0.88	13,409	7,449	13,778	7,654	15,275	8,486	
					201,304	201,304	32.97	9.78	0.92	13,320	7,400	13,703	7,613	15,188	8,438	
					Average for above 121 analyses, Pool No. 7, C. & O., fiscal years 1920 and 1921.....											
POOL NO. 8, RUN-OF-MINE COAL.																
Holland.....	Norfolk, Va.....	Sewalls Point.....	Mar. 6, 1920.....	1,540.....	3.20	29.20	61.90	8.90	1.30	13,520	7,511	13,960	7,756	15,320	8,511	
					3.00	29.40	62.70	7.90	1.10	13,760	7,644	14,180	7,878	15,400	8,556	
					3.30	28.80	62.70	8.50	1.30	13,670	7,594	14,130	7,850	15,440	8,578	
					2.80	28.30	64.10	7.60	0.95	13,880	7,711	14,290	7,939	15,470	8,594	
Average for above 4 analyses, Pool No. 8, Sewalls Point, fiscal year 1920.....				6,160	3.08	28.93	8.23	1.18	13,704	7,613	14,140	7,856	15,408	8,560		

POOL NO. 9, RUN-OF-MINE COAL.

Holland.....	Baltimore, Md.....	Curtis Bay.....	1,838	3.89	17.73	69.71	12.56	1.61	13,048	7,249	13,576	7,542	15,526	8,626
Do.....	Philadelphia, Pa.....	Greenwich.....	1,255	2.00	20.00	72.70	7.30	1.10	14,180	7,878	14,470	8,089	15,610	8,672
Do.....	.....do.....	.....do.....	887	2.28	18.93	69.57	11.50	1.38	13,346	7,414	13,657	7,587	15,432	8,573
Average for above 2 analyses, Pool No. 9, Greenwich Pier, fiscal years 1920 and 1921.														
			2,142	2.14	19.47	71.13	9.40	1.24	13,763	7,646	14,064	7,813	15,523	8,624

POOL NO. 10, RUN-OF-MINE COAL.

Holland.....	Baltimore, Md.....	Curtis Bay.....	832	2.96	18.78	66.18	15.04	1.92	12,182	6,768	13,095	7,275	15,414	8,563
Do.....	.....do.....	.....do.....	1,753	2.63	19.27	67.72	13.01	1.36	13,107	7,282	13,461	7,478	15,477	8,597
Do.....	.....do.....	.....do.....	1,733	3.42	18.46	67.80	13.74	1.89	12,335	7,131	13,290	7,383	15,407	8,550
Do.....	.....do.....	.....do.....	874	2.83	17.91	68.36	13.73	1.94	12,926	7,181	13,302	7,390	15,419	8,566
Average for above 4 analyses, Pool No. 10, Curtis Bay Pier, fiscal year 1921.....														
			5,172	2.96	18.61	67.51	13.88	1.78	12,894	7,163	13,287	7,382	15,428	8,571
Holland.....	Baltimore, Md.....	Canton Pier.....	2,338	7.01	22.91	65.25	11.84	2.39	12,564	6,990	13,511	7,506	15,320	8,514
Do.....	Philadelphia, Pa.....	Greenwich Pier.....	1,405	2.57	20.34	69.64	10.02	3.54	13,514	7,508	13,871	7,706	15,416	8,564
Do.....	.....do.....	.....do.....	1,405	2.44	20.65	68.57	10.78	3.79	13,477	7,497	13,813	7,674	15,482	8,601
Do.....	.....do.....	.....do.....	1,643	2.17	20.76	68.88	10.36	3.30	13,509	7,505	13,847	7,683	15,447	8,582
Do.....	.....do.....	.....do.....	1,242	2.10	22.87	60.17	16.96	3.41	12,503	6,947	12,782	7,101	15,393	8,552
Do.....	.....do.....	.....do.....	1,242	2.10	22.61	62.97	14.42	3.34	12,773	7,096	13,047	7,248	15,245	8,469
Average for above 5 analyses, Pool No. 10, Greenwich Pier, fiscal years 1920 and 1921.														
			7,100	2.34	21.45	66.04	12.51	3.40	13,157	7,309	13,472	7,484	15,398	8,554

POOL NO. 11, RUN-OF-MINE COAL.

Holland.....	Baltimore, Md.....	Curtis Bay.....	2,053	3.95	18.91	67.77	13.32	1.77	12,893	7,163	13,423	7,457	15,486	8,603
Do.....	.....do.....	.....do.....	1,237	2.56	18.88	67.39	13.73	2.02	12,943	7,191	13,283	7,379	15,397	8,554
Do.....	.....do.....	.....do.....	3,258	3.37	21.37	66.49	12.14	1.70	13,061	7,256	13,517	7,509	15,385	8,547
Average for above 3 analyses, Pool No. 11, Curtis Bay Pier, fiscal year 1921.....														
			6,548	3.29	19.72	67.22	13.06	1.83	12,967	7,204	13,408	7,449	15,422	8,568
Holland.....	Baltimore, Md.....	Canton Pier.....	441	4.60	20.94	67.29	11.77	3.88	13,014	7,230	13,641	7,578	15,461	8,589
Do.....	Philadelphia, Pa.....	Greenwich Pier.....	1,095	1.71	22.12	63.51	14.37	2.56	12,930	7,183	13,155	7,308	15,362	8,534
Do.....	.....do.....	.....do.....	1,306	2.95	18.72	65.31	15.97	1.42	12,496	6,942	12,876	7,183	15,323	8,513
Average for above 2 analyses, Pool No. 11, Greenwich Pier, fiscal year 1921.....														
			2,401	2.33	20.42	64.41	15.17	1.99	12,713	7,063	13,016	7,231	15,344	8,524

TABLE 2.—Analyses of pool coal, Atlantic shipping ports—Continued.
POOL NO. 11, RUN-OF-MINE COAL—Continued.

Consignee.	Port of loading.	Pier.	Date.	Tons deliv- ered.	Proximate analyses.							Calorific value, per pound.					
					As re- ceived.			Dry coal.				As received.		Dry coal.		Moisture-free and ash-free.	
					Mois- ture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sul- phur, per cent.	B. t. u.	Calo- ries.	B. t. u.	Calo- ries.	B. t. u.	Calo- ries.	B. t. u.	Calo- ries.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Holland.....	Philadelphia, Pa.....	Richmond Pier.....	Nov. 1, 1920.....	1,487	3.49	18.67	65.80	15.53	2.79	12,344	6,858	12,790	7,106	15,141	8,412		
Do.....	do.....	do.....	do.....	1,487	3.34	19.10	65.45	15.45	2.76	12,471	6,928	12,902	7,168	15,260	8,478		
Do.....	do.....	do.....	do.....	1,487	2.94	17.97	62.77	19.26	2.62	12,092	6,718	12,369	6,872	15,320	8,511		
Do.....	do.....	do.....	Nov. 15, 1920.....	1,343	5.75	26.07	64.76	9.17	1.28	13,130	7,294	13,931	7,739	15,337	8,521		
Do.....	do.....	do.....	do.....	1,343	4.23	24.81	64.67	10.52	2.57	13,279	7,377	13,866	7,703	15,496	8,609		
Do.....	do.....	do.....	do.....	1,343	3.26	29.79	57.05	13.16	1.89	12,848	7,138	13,281	7,378	15,294	8,497		
Average for above 6 analyses, Pool No. 11, Richmond Pier, fiscal year 1921.....				8,490	3.72	22.74	63.41	13.85	2.32	12,699	7,055	13,190	7,328	15,311	8,506		
POOL NO. 15, RUN-OF-MINE COAL.																	
Switzerland.....	Philadelphia, Pa.....	Greenwich Pier.....	Nov. 13, 1920.....	716	3.05	30.67	58.47	10.86	1.65	13,110	7,283	13,522	7,512	15,001	8,334		
POOL NO. 18, RUN-OF-MINE COAL.																	
Holland.....	Baltimore, Md.....	Curtis Bay Pier.....	Aug. 2, 1920.....	1,640	3.68	21.41	62.91	15.68	2.21	12,523	6,957	13,001	7,223	15,418	8,566		
Do.....	Philadelphia, Pa.....	Richmond Pier.....	June 17, 1920.....	1,158	3.92	18.08	63.50	18.42	3.17	12,109	6,727	12,485	6,936	15,304	8,502		
POOL NO. 21, RUN-OF-MINE COAL.																	
Holland.....	Philadelphia, Pa.....	Greenwich Pier.....	Oct. 2, 1920.....	923	3.07	36.67	51.71	11.62	3.30	12,972	7,207	13,383	7,435	15,142	8,412		
Switzerland.....	do.....	do.....	Oct. 5, 1920.....	789	3.33	32.52	53.99	13.49	2.69	12,527	6,959	12,959	7,199	14,980	8,322		
Average for above 2 analyses, Pool No. 21, Greenwich Pier, fiscal year 1921.....				1,712	3.20	34.60	52.84	12.56	3.00	12,750	7,083	13,171	7,317	15,063	8,368		

POOL NO. 30, LUMP, OVER THREE-FOURTHS-INCH SCREEN.

Switzerland.....	Baltimore, Md.....	Canton Pier.....	2,129	2.50	39.40	53.20	7.40	13,490	7,494	13,830	7,683	14,940	8,300
Do.....	do.....	do.....	2,129	2.30	37.60	53.40	8.00	13,360	7,594	13,670	7,594	15,020	8,344
Do.....	do.....	do.....	2,129	2.10	37.80	55.40	9.00	13,740	7,794	14,030	7,794	15,050	8,361
Do.....	do.....	do.....	896	3.32	38.43	54.23	7.34	13,474	7,486	13,937	7,473	15,041	8,356
Do.....	do.....	do.....	2,272	3.34	37.04	52.31	9.75	12,999	7,222	13,448	7,471	14,901	8,278
Do.....	do.....	do.....	2,104	2.19	38.47	56.26	5.27	13,961	7,756	14,274	7,930	15,068	8,371
Do.....	do.....	do.....	2,104	2.16	37.47	57.21	5.32	13,987	7,771	14,296	7,942	15,099	8,388
Average for above 7 analyses, Pool No. 30, Canton Pier, fiscal years 1920 and 1921.			13,763	2.56	38.16	54.57	7.27	13,569	7,538	13,926	7,737	15,018	8,343
Switzerland.....	Philadelphia, Pa.....	Greenwich Pier.....	934	2.30	37.20	53.00	9.80	13,160	7,311	13,470	7,483	14,940	8,300
Do.....	do.....	do.....	830	2.69	39.53	56.15	4.32	13,920	7,733	14,305	7,947	14,951	8,306
Do.....	do.....	do.....	719	2.99	37.99	56.90	5.11	14,183	7,879	14,547	7,879	14,947	8,304
Do.....	do.....	do.....	2,204	2.58	36.64	55.47	7.86	13,597	7,554	13,951	7,553	15,153	8,418
Do.....	do.....	do.....	1,360	2.57	37.59	55.77	6.64	13,578	7,543	13,936	7,742	14,927	8,298
Do.....	do.....	do.....	1,567	3.61	37.59	54.64	7.77	13,299	7,388	13,797	7,665	14,959	8,311
Do.....	do.....	do.....	1,567	3.98	38.36	55.08	6.56	13,445	7,469	14,002	7,779	14,985	8,325
Do.....	do.....	do.....	3,465	2.09	37.62	55.99	6.39	13,578	7,543	13,868	7,704	14,815	8,231
Average for above 8 analyses, Pool No. 30, Greenwich Pier, fiscal years 1920 and 1921.			13,646	2.85	37.82	55.37	6.81	13,542	7,523	13,939	7,744	14,958	8,310
Switzerland.....	Philadelphia, Pa.....	Richmond Pier.....	2,049	1.81	39.00	54.10	6.90	13,638	7,577	13,889	7,716	14,918	8,288

POOL NO. 31, RUN-OF-MINE COAL.

Holland.....	Baltimore, Md.....	Curtis Bay Pier.....	877	2.20	31.90	56.70	11.40	13,000	7,222	13,300	7,389	15,010	8,339
Do.....	do.....	do.....	1,444	2.90	33.70	57.10	9.20	13,180	7,322	13,580	7,544	14,960	8,311
Do.....	do.....	do.....	1,892	2.40	34.80	56.00	9.20	13,300	7,369	13,630	7,572	15,010	8,339
Do.....	do.....	do.....	1,892	2.00	33.00	57.60	9.40	13,360	7,422	13,640	7,578	15,060	8,363
Do.....	do.....	do.....	1,404	2.60	33.70	55.00	11.30	13,030	7,239	13,380	7,433	15,090	8,383
Do.....	do.....	do.....	1,404	3.40	34.10	54.60	11.30	12,820	7,122	13,270	7,372	14,960	8,311
Do.....	do.....	do.....	1,247	4.20	33.50	56.60	9.90	13,030	7,239	13,610	7,561	15,100	8,389
Do.....	do.....	do.....	1,247	3.10	33.00	57.30	9.70	13,180	7,322	13,600	7,556	15,060	8,367
Do.....	do.....	do.....	1,793	4.00	32.70	57.10	10.20	12,820	7,122	13,360	7,422	14,870	8,261
Average for above 9 analyses, Pool No. 31, Curtis Bay Pier, fiscal year 1920....			13,200	2.98	33.38	56.44	10.18	13,084	7,269	13,486	7,492	15,014	8,341
Switzerland.....	Baltimore, Md.....	Canton Pier.....	1,107	1.90	34.70	54.50	10.80	13,290	7,383	13,540	7,522	15,180	7,433
Do.....	do.....	do.....	1,412	3.82	35.77	49.84	14.39	12,183	6,767	12,667	7,037	14,796	8,220
Do.....	do.....	do.....	1,412	3.87	34.13	50.79	15.08	11,892	6,608	12,371	6,873	14,568	8,093
Do.....	do.....	do.....	524	2.36	27.61	62.34	10.05	13,073	7,263	13,389	7,438	14,885	8,269
Do.....	do.....	do.....	913	2.60	36.19	54.31	9.50	13,188	7,327	13,540	7,522	14,961	8,312
Do.....	do.....	do.....	913	3.43	35.88	56.52	7.60	13,307	7,393	13,780	7,656	14,913	8,283
Do.....	do.....	do.....	913	2.98	34.68	54.81	10.51	12,944	7,191	13,342	7,412	14,909	8,295
Do.....	do.....	do.....	913	3.43	36.84	53.41	9.75	12,930	7,183	13,389	7,488	14,836	8,242

TABLE 2.—Analyses of pool coal, Atlantic shipping ports—Continued.
POOL NO. 31, RUN-OF-MINE COAL—Continued.

Consignee.	Port of loading.	Pier.	Date.	Tons deliv- ered.	Proximate analyses.					Calorific value, per pound.					
					As re- ceived.	Dry coal.			As re- ceived.	Dry coal.		As re- ceived.	Dry coal.		Moisture-free and ash-free.
						Volat- ile mat- ter, per cent.	Fixed carbon, per cent.	Ash, per cent.		Sul- phur, per cent.	B. t. u.		Calo- ries.	B. t. u.		Calo- ries.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Switzerland	Baltimore, Md.	Canton Pier	Nov. 17, 1920	1,139	3.89	35.55	50.36	14.09	2.03	12,130	6,739	12,621	7,012	14,691	8,162
Do.	do.	do.	do.	1,139	3.31	37.55	50.74	11.71	2.06	12,554	6,974	12,984	7,213	14,706	8,170
Do.	do.	do.	do.	1,139	2.87	38.04	52.34	9.62	2.00	13,020	7,233	13,405	7,447	14,832	8,240
Average for above 11 analyses, Pool No. 31, Canton Pier, fiscal years 1920 and 1921.															
Switzerland	Philadelphia, Pa.	Greenwich Pier	July 17, 1920	1,945	4.63	34.49	53.04	12.47	1.76	12,451	6,917	12,971	7,206	14,819	8,233
Do.	do.	do.	July 24, 1920	2,991	3.01	36.72	54.75	8.53	1.64	13,284	7,380	13,696	7,609	14,973	7,818
Do.	do.	do.	Aug. 1, 1920	3,081	2.88	37.87	54.96	7.17	1.41	13,506	7,503	13,907	7,726	14,981	8,323
Do.	do.	do.	Aug. 4, 1920	6,667	2.49	38.02	54.89	7.09	1.38	13,258	7,366	13,881	7,712	14,940	8,300
Do.	do.	do.	Aug. 6, 1920	1,538	3.31	35.32	55.81	8.87	1.37	13,313	7,396	13,769	7,649	15,010	8,339
Do.	do.	do.	Aug. 20, 1920	1,454	3.49	37.37	50.96	7.74	1.48	12,630	7,017	13,087	7,271	14,816	8,231
Holland	do.	do.	Nov. 13, 1920	1,724	2.23	36.56	55.70	11.67	1.43	13,446	7,472	13,753	7,641	14,907	8,282
Switzerland	do.	do.	do.	1,924	1.94	34.76	57.69	8.55	1.19	13,755	7,442	14,028	7,793	15,173	8,429
Holland	do.	do.	Dec. 9, 1920	2,324	1.84	35.87	55.48	8.65	1.19	13,475	7,486	13,798	7,666	15,104	8,391
Do.	do.	do.	do.	2,324	2.59	38.12	53.25	8.63	1.06	13,440	7,467	13,797	7,665	15,100	8,389
Average for above 10 analyses, Pool No. 31, Greenwich Pier, fiscal year 1921.															
				20,372	2.89	36.51	54.65	8.84	1.53	13,274	7,374	13,669	7,594	14,995	8,331

POOL NO. 33, LUMP, OVER THREE-FOURTHS-INCH SCREEN.

Switzerland	Baltimore, Md.	Curtis Bay	Aug. 30, 1919	1,750	1.60	38.60	52.20	9.20	2.75	13,560	7,533	13,780	7,656	15,180	8,433
Do.	do.	do.	Oct. 15, 1919	238	2.00	37.70	52.70	9.60	3.80	13,300	7,389	13,560	7,533	15,000	8,333
Do.	do.	do.	do.	238	1.90	37.40	52.90	9.70	3.75	13,320	7,400	13,580	7,544	15,040	8,356
Do.	do.	do.	do.	238	1.90	37.80	53.00	9.20	3.65	13,400	7,444	13,660	7,589	15,050	8,361
Do.	do.	do.	do.	238	1.90	38.40	52.40	9.20	3.50	13,460	7,478	13,720	7,622	15,110	8,394

TABLE 2.—Analyses of pool coal, Atlantic shipping ports—Continued.
POOL NO. 33, LUMP, OVER THREE-FOURTHS-INCH SCREEN—Continued.

Consignee.	Port of loading.	Pier.	Date.	Tons delivered.	Proximate analyses.					Calorific value, per pound.					
					As received.	Dry coal.			Moisture-free and ash-free.	Dry coal.		Moisture-free and ash-free.			
						B. t. u.	Calo-ries.	B. t. u.		Calo-ries.	B. t. u.	Calo-ries.	B. t. u.	Calo-ries.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Switzerland	Baltimore, Md.	Curtis Bay	Dec. 10, 1920	1,202	1.28	38.40	54.20	7.40	2.50	14,009	7,783	14,191	7,884	15,325	8,514
Do.	do.	do.	do.	1,202	1.39	39.49	52.70	7.81	3.26	13,799	7,666	13,994	7,774	15,180	8,433
Do.	do.	do.	Dec. 13, 1920	1,014	1.98	38.26	54.80	6.94	2.12	13,983	7,788	14,285	7,925	15,329	8,516
Do.	do.	do.	do.	1,014	1.74	38.90	53.89	7.21	2.13	13,942	7,745	14,189	7,883	15,291	8,495
Average for above 60 analyses, Pool No. 33, Curtis Bay Pier, fiscal years 1920 and 1921.				107,766	2.10	39.35	51.88	8.77	3.31	13,444	7,469	13,732	7,629	15,052	8,362
Switzerland	Baltimore, Md.	Canton Pier	May 21, 1920	623	2.10	41.00	49.50	8.60	4.40	13,250	7,361	13,530	7,517	14,800	8,222
Do.	do.	do.	May 23, 1920	2,555	1.70	35.60	56.55	7.90	2.65	13,830	7,623	13,070	7,817	15,280	8,493
Do.	do.	do.	June 20, 1920	2,369	2.06	34.64	51.65	13.41	2.56	12,820	7,122	13,060	7,272	15,117	8,398
Do.	do.	do.	Oct. 20, 1920	1,178	2.19	37.80	49.26	12.94	2.26	12,832	6,879	12,586	7,103	14,686	8,139
Do.	do.	do.	Dec. 15, 1920	1,014	2.86	38.56	51.02	4.22	2.77	12,862	7,146	13,241	7,366	14,781	8,212
Do.	do.	do.	do.	1,014	2.66	38.23	51.86	9.91	2.40	13,006	7,226	13,361	7,423	14,831	8,239
Average for above 6 analyses, Pool No. 33, Canton Pier, fiscal years 1920 and 1921.				6,783	2.42	37.79	51.68	10.53	2.84	13,023	7,235	13,346	7,414	14,917	8,287
Switzerland	Philadelphia, Pa.	Greenwich Pier	Oct. 27, 1919	2,192	1.70	37.70	55.40	6.90	2.20	13,890	7,717	14,130	7,850	15,170	8,428
Do.	do.	do.	do.	2,192	2.10	37.60	54.20	8.20	2.55	13,610	7,561	13,910	7,728	15,150	8,417
Do.	do.	do.	do.	2,693	1.80	39.20	51.90	8.90	3.06	12,470	7,472	13,700	7,611	15,040	8,356
Do.	do.	do.	Oct. 12, 1920	2,693	2.90	37.37	51.59	11.04	3.06	13,484	7,119	13,197	7,352	14,835	8,242
Do.	do.	do.	Nov. 28, 1920	1,782	2.78	36.78	50.38	7.84	1.45	13,355	7,419	13,787	7,632	14,905	8,281
Do.	do.	do.	do.	1,782	2.91	37.02	55.92	7.06	1.44	13,478	7,488	13,882	7,712	14,936	8,298
Do.	do.	do.	do.	1,402	3.09	38.06	52.20	9.74	2.07	12,947	7,193	13,360	7,422	14,802	8,223
Average for above 7 analyses, Pool No. 33, Greenwich Pier, fiscal years 1920 and 1921.				14,235	2.47	37.68	53.79	8.53	2.26	13,364	7,424	13,702	7,612	14,980	8,322

Switzerland.....	Philadelphia, Pa.....	Richmond Pier.....	Dec. 8, 1920.....	39.49	52.33	8.18	3.13	13,244	7,858	13,618	7,566	14,831	8,239
Do.....	do.....	do.....	Dec. 13, 1920.....	2.75	51.48	7.79	3.29	13,199	7,833	13,581	7,545	14,728	8,182
Average for above 2 analyses, Pool No. 33, Richmond Pier, fiscal year 1921.....				2.78	51.90	7.99	3.21	13,222	7,846	13,600	7,556	14,781	8,212

POOL NO. 34, RUN-OF-MINE COAL.

Switzerland.....	Baltimore, Md.....	Curtis Bay Pier.....	Mar. 19, 1920.....	37.90	53.70	8.40	2.80	13,230	7,350	13,700	7,611	14,950	8,306
Do.....	do.....	do.....	do.....	36.70	52.50	10.80	3.25	12,870	7,150	13,330	7,406	14,940	8,300
Do.....	do.....	do.....	do.....	39.00	52.70	7.40	3.45	13,370	7,483	13,870	7,706	14,970	8,317
Do.....	do.....	do.....	do.....	38.00	51.40	9.90	3.25	13,210	7,339	13,540	7,522	14,980	8,322
Do.....	do.....	do.....	Mar. 21, 1920.....	38.40	51.90	8.60	3.75	13,370	7,428	13,620	7,567	15,000	8,330
Do.....	do.....	do.....	do.....	39.40	51.50	9.10	3.65	13,420	7,456	13,660	7,589	15,030	8,339
Do.....	do.....	do.....	Mar. 27, 1920.....	37.10	51.90	7.10	2.65	13,650	7,533	13,930	7,739	14,990	8,320
Do.....	do.....	do.....	do.....	41.10	51.50	7.40	2.95	13,660	7,539	13,900	7,722	15,010	8,339
Do.....	do.....	do.....	do.....	38.70	52.80	8.60	2.95	13,690	7,606	13,970	7,756	15,090	8,329
Do.....	do.....	do.....	Mar. 31, 1920.....	38.80	51.60	8.60	3.25	13,540	7,561	13,770	7,650	15,070	8,372
Do.....	do.....	do.....	do.....	39.50	51.00	9.50	3.40	13,490	7,494	13,850	7,694	15,160	8,411
Do.....	do.....	do.....	do.....	38.50	51.90	8.00	3.00	13,540	7,522	13,800	7,667	15,000	8,353
Do.....	do.....	do.....	Apr. 8, 1920.....	39.50	51.90	8.20	3.55	13,490	7,494	13,780	7,661	15,070	8,372
Do.....	do.....	do.....	do.....	40.20	51.30	8.50	3.70	13,530	7,517	13,820	7,650	15,060	8,353
Do.....	do.....	do.....	Apr. 22, 1920.....	38.40	53.70	9.90	2.25	13,690	7,606	13,970	7,761	15,160	8,422
Do.....	do.....	do.....	do.....	38.80	52.40	8.80	3.10	13,480	7,489	13,770	7,650	15,100	8,389
Do.....	do.....	do.....	Apr. 27, 1920.....	38.00	53.90	7.50	2.70	13,700	7,611	13,970	7,761	15,100	8,389
Do.....	do.....	do.....	do.....	38.40	52.70	8.90	3.40	13,460	7,478	13,770	7,650	15,120	8,400
Do.....	do.....	do.....	do.....	38.70	52.50	8.80	3.10	13,550	7,528	13,840	7,689	15,180	8,433
Do.....	do.....	do.....	do.....	39.50	51.90	8.90	3.05	13,500	7,500	13,770	7,650	15,110	8,394
Do.....	do.....	do.....	May 12, 1920.....	38.20	52.80	8.30	3.10	13,500	7,500	13,800	7,667	15,060	8,361
Do.....	do.....	do.....	do.....	38.50	52.60	8.90	3.15	13,420	7,456	13,780	7,628	15,060	8,363
Do.....	do.....	do.....	do.....	38.50	52.60	8.90	3.30	13,390	7,439	13,710	7,617	15,060	8,363
Do.....	do.....	do.....	do.....	38.00	52.20	8.90	3.00	13,480	7,489	13,760	7,644	15,110	8,394
Do.....	do.....	do.....	May 18, 1920.....	38.70	52.40	8.90	3.00	13,580	7,544	13,860	7,700	15,210	8,428
Do.....	do.....	do.....	do.....	36.00	52.80	11.20	3.10	13,230	7,350	13,600	7,483	15,170	8,439
Do.....	do.....	do.....	do.....	38.60	53.00	8.20	2.65	13,660	7,589	13,940	7,744	15,190	8,439
Do.....	do.....	do.....	May 21, 1920.....	39.50	52.60	9.90	3.25	13,650	7,583	13,880	7,683	15,130	8,406
Do.....	do.....	do.....	do.....	40.50	50.90	8.60	3.70	13,380	7,433	13,650	7,744	15,130	8,294
Do.....	do.....	do.....	do.....	38.40	53.40	8.20	3.75	13,720	7,622	13,940	7,744	15,190	8,439
Do.....	do.....	do.....	do.....	36.20	54.00	8.80	2.85	13,390	7,439	13,700	7,611	15,190	8,439
Do.....	do.....	do.....	May 24, 1920.....	37.40	53.90	8.70	2.85	13,540	7,522	13,850	7,694	15,170	8,428
Do.....	do.....	do.....	do.....	36.20	54.90	8.90	3.05	13,520	7,511	13,860	7,700	15,210	8,450
Do.....	do.....	do.....	do.....	36.90	52.90	10.20	2.95	13,320	7,400	13,620	7,567	15,160	8,422
Do.....	do.....	do.....	do.....	39.00	51.20	9.60	3.55	13,250	7,361	13,570	7,539	15,040	8,356
Do.....	do.....	do.....	May 26, 1920.....	39.30	51.10	9.80	3.45	13,240	7,356	13,530	7,517	14,960	8,311
Do.....	do.....	do.....	do.....	39.30	51.30	9.10	3.70	13,450	7,472	13,690	7,606	15,060	8,367
Do.....	do.....	do.....	do.....	38.60	51.50	9.90	3.75	13,250	7,361	13,520	7,511	15,010	8,339
Do.....	do.....	do.....	June 1, 1920.....	38.70	51.90	9.40	3.15	13,360	7,422	13,600	7,556	15,010	8,339
Do.....	do.....	do.....	do.....	36.20	52.50	11.30	3.10	12,960	7,200	13,280	7,378	14,980	8,322
Do.....	do.....	do.....	do.....	35.40	52.60	11.00	3.10	12,820	7,122	13,170	7,317	14,800	8,222

TABLE 2.—Analyses of pool coal, Atlantic shipping ports—Continued.
POOL NO. 34, RUN-OF-MINE COAL—Continued.

Consignee.	Port of loading.	Pier.	Date.	Tons deliv- ered.	Proximate analyses.				Calorific value, per pound.						
					As re- ceived.	Dry coal.			As re- ceived.	Dry coal.					
						Mois- ture, per cent.	Volat- ile matter, per cent.	Fixed carbon, per cent.		Ash, per cent.	Sul- phur, per cent.	B. t. u.	Calo- ries.	B. t. u.	Calo- ries.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Holland.....	Baltimore, Md.....	Curtis Bay Pier.....	June 4, 1920	1,247	3.10	37.90	52.20	9.90	3.30	13,080	7,267	13,500	7,500	14,980	8,322
Do.....	do.....	do.....	do.....	1,247	2.70	38.80	53.30	7.90	2.95	13,410	7,450	13,780	7,656	14,960	8,311
Do.....	do.....	do.....	do.....	1,247	2.90	39.30	51.20	9.50	3.45	13,110	7,283	13,480	7,464	14,910	8,283
Do.....	do.....	do.....	do.....	1,719	2.20	39.60	52.10	8.30	3.50	13,370	7,428	13,680	7,600	14,920	8,289
Switzerland.....	do.....	do.....	June 6, 1920	1,719	2.30	39.50	52.10	8.40	3.95	13,410	7,450	13,730	7,628	14,960	8,328
Do.....	do.....	do.....	do.....	1,719	3.90	41.10	46.60	12.30	3.75	12,280	6,822	12,770	7,064	14,960	8,089
Do.....	do.....	do.....	do.....	1,719	2.10	39.50	50.90	9.60	3.90	13,230	7,350	13,510	7,506	14,940	8,300
Do.....	do.....	do.....	do.....	1,719	2.00	35.90	54.40	9.70	2.90	13,920	7,400	13,590	7,550	15,050	8,301
Do.....	do.....	do.....	do.....	2,270	2.90	40.40	50.30	8.30	3.95	13,010	7,228	13,400	7,444	14,780	8,211
Do.....	do.....	do.....	June 8, 1920	1,876	2.90	39.10	52.60	8.30	3.00	13,560	7,167	13,860	7,700	15,120	8,400
Do.....	do.....	do.....	do.....	1,876	2.80	40.20	49.90	9.90	3.65	13,900	7,167	13,280	7,378	14,740	8,250
Do.....	do.....	do.....	do.....	1,876	2.40	37.70	52.80	9.50	3.05	13,220	7,306	13,410	7,450	14,850	8,250
Do.....	do.....	do.....	do.....	2,494	2.70	37.20	53.10	9.70	3.05	13,150	7,306	13,550	7,528	14,970	8,317
Do.....	do.....	do.....	do.....	2,494	1.90	40.10	52.20	7.80	3.20	13,680	7,600	13,960	7,780	14,860	8,311
Do.....	do.....	do.....	do.....	2,494	1.90	39.80	52.20	8.00	3.25	13,680	7,600	13,960	7,780	15,110	8,394
Do.....	do.....	do.....	do.....	1,603	3.01	40.68	49.81	9.53	3.48	13,167	7,315	13,576	7,562	15,038	8,337
Do.....	do.....	do.....	do.....	1,603	3.02	38.98	51.10	8.93	3.32	13,221	7,450	13,648	7,582	15,068	8,336
Do.....	do.....	do.....	do.....	1,603	3.25	38.71	52.55	8.71	2.95	13,374	7,450	13,824	7,680	15,968	8,413
Do.....	do.....	do.....	do.....	1,978	2.76	38.35	53.44	8.21	3.09	13,417	7,454	13,789	7,666	15,033	8,352
Do.....	do.....	do.....	do.....	1,978	2.66	41.28	51.19	7.53	3.06	13,522	7,512	13,891	7,717	15,022	8,346
Do.....	do.....	do.....	do.....	1,978	2.82	37.28	54.57	8.15	2.79	13,354	7,439	13,756	7,642	14,977	8,339
Do.....	do.....	do.....	do.....	1,978	2.21	38.14	52.55	9.31	3.03	13,313	7,396	13,286	7,381	15,012	8,340
Do.....	do.....	do.....	do.....	1,917	2.96	36.57	53.01	11.50	3.22	12,863	7,146	13,342	7,563	15,010	8,339
Do.....	do.....	do.....	June 22, 1920	1,917	3.89	36.74	51.16	10.42	3.10	13,034	7,241	13,433	7,463	14,894	8,301
Do.....	do.....	do.....	do.....	2,356	2.97	38.41	50.61	10.10	3.37	12,882	7,162	13,300	7,389	14,940	8,300
Do.....	do.....	do.....	do.....	2,356	3.07	38.41	49.98	8.97	3.85	13,100	7,278	13,491	7,495	14,820	8,233
Do.....	do.....	do.....	do.....	2,356	2.89	41.05	49.55	9.57	3.56	13,036	7,242	13,468	7,452	14,883	8,274
Do.....	do.....	do.....	do.....	1,532	1.76	41.85	49.51	8.64	3.76	13,451	7,473	13,692	7,607	14,987	8,326
Do.....	do.....	do.....	July 10, 1920	1,532	1.76	41.85	49.51	8.64	3.76	13,451	7,473	13,692	7,607	14,987	8,326

		Average for above 104 analyses, Pool No. 34, Curtis Bay Pier, fiscal years 1920 and 1921.											
Do.	do.	1.84	42.66	49.30	0.04	3.95	13.540	7.522	13.794	7.663	15.000	8.333	
Do.	do.	2.22	38.40	51.37	6.17	3.66	13.313	7.306	13.615	7.588	15.000	8,328	
Do.	do.	2.54	40.67	50.76	8.57	3.96	13.410	7.445	13.759	7,644	15,049	8,328	
Do.	do.	4.55	34.53	57.17	8.30	2.07	13.974	7.373	13.907	7,726	15,165	8,321	
Do.	July 16, 1920	3.47	34.71	57.10	8.19	2.07	13.900	7.378	13.896	7,722	15,138	8,410	
Do.	do.	4.49	35.67	52.59	11.74	3.07	12,899	7,166	13,885	7,492	14,142	8,412	
Do.	do.	1.87	4.01	7.65	11.67	2.02	13,553	7,518	14,098	7,832	15,271	8,454	
Do.	July 17, 1920	1.86	35.59	52.74	11.67	3.40	13,152	7,807	13,401	7,445	15,172	8,429	
Do.	do.	2.15	40.80	50.94	8.26	3.10	13,522	7,512	13,819	7,677	15,063	8,368	
Do.	do.	1.67	41.89	50.65	7.46	3.38	13,673	7,996	13,905	7,439	15,028	8,348	
Do.	July 23, 1920	1.30	38.96	50.49	10.55	3.38	13,216	7,542	13,390	7,550	15,025	8,347	
Do.	do.	1.219	39.00	51.21	9.79	4.54	13,177	7,521	13,554	7,747	15,024	8,361	
Do.	do.	1.219	43.00	51.91	7.19	3.31	13,685	7,558	13,944	7,624	15,049	8,361	
Do.	do.	2.46	40.05	51.14	8.81	4.04	13,373	7,436	13,723	7,624	15,049	8,361	
Do.	do.	2.69	40.52	50.39	9.07	4.41	13,173	7,318	13,527	7,515	14,876	8,264	
Holland	Aug. 5, 1920	2.086	39.42	52.31	8.27	2.07	13,608	7,860	13,923	7,735	15,178	8,332	
Do.	do.	1.342	39.33	52.64	8.03	3.02	13,459	7,477	13,904	7,724	15,118	8,399	
Do.	do.	3.18	38.17	54.41	7.31	2.44	13,527	7,584	13,991	7,773	15,084	8,386	
Do.	do.	3.28	36.57	53.75	9.68	2.62	13,171	7,515	13,971	7,767	15,021	8,384	
Do.	Aug. 17, 1920	2.99	34.50	54.59	10.61	2.82	13,477	7,482	13,477	7,482	14,921	8,289	
Do.	do.	2.51	40.26	48.73	11.01	2.97	12,986	7,164	13,228	7,426	14,954	8,208	
Do.	do.	1.728	2.81	39.56	49.71	3.40	12,951	7,195	13,325	7,403	14,927	8,293	
Do.	do.	2.28	40.46	50.74	8.80	2.62	13,365	7,425	13,677	7,598	14,987	8,332	
Do.	do.	2.44	38.84	50.78	10.38	2.52	13,070	7,261	13,397	7,443	14,949	8,305	
Holland	Oct. 21, 1920	2.882	37.99	53.52	8.49	2.61	13,016	7,231	13,518	7,510	14,772	8,207	
Do.	do.	1.803	35.91	53.46	10.63	2.57	12,484	6,936	13,089	7,272	14,646	8,137	
Do.	do.	2.62	37.63	53.07	9.30	2.82	13,211	7,339	13,566	7,537	14,957	8,309	
Do.	do.	2.48	38.85	53.36	7.79	2.65	13,536	7,520	13,880	7,711	15,053	8,363	
Do.	Nov. 19, 1920	2.335	38.06	53.67	8.27	2.67	13,041	7,245	13,630	7,572	14,858	8,254	
Do.	do.	2.335	37.95	52.52	9.53	2.23	12,907	7,171	13,425	7,458	14,839	8,244	
Do.	do.	2.51	38.70	52.25	9.05	3.17	13,315	7,397	13,658	7,588	15,017	8,343	
Switzerland	May 10, 1920	2.292	35.20	50.90	13.90	4.05	12,800	7,111	12,970	7,206	15,060	8,367	
Do.	do.	1.60	34.30	53.40	11.30	2.90	13,400	7,211	13,200	7,333	15,150	8,361	
Do.	do.	2.92	33.80	52.90	12.30	3.55	13,180	7,322	13,400	7,444	15,110	8,394	
Do.	do.	1.70	34.70	54.70	10.60	2.35	13,290	7,383	13,520	7,511	15,130	8,406	
Do.	do.	2.37	33.40	54.00	12.60	2.95	13,050	7,250	13,260	7,367	15,170	8,428	
Do.	do.	1.80	33.10	53.40	13.50	3.00	12,860	7,144	13,100	7,278	15,140	8,411	
Do.	do.	2.03	33.50	53.50	13.30	3.65	13,110	7,283	13,110	7,283	15,120	8,400	
Do.	do.	1.80	34.90	52.50	12.30	3.40	13,070	7,261	13,310	7,394	15,170	8,428	
Do.	May 23, 1920	1.550	34.20	53.60	12.30	3.15	13,080	7,283	13,310	7,394	15,160	8,422	
Do.	do.	1.550	34.20	54.20	12.50	3.40	12,660	7,056	12,960	7,200	14,950	8,306	
Do.	do.	2.30	34.80	51.90	13.30	3.45	12,660	7,033	12,960	7,200	14,950	8,306	
Do.	do.	1.550	35.80	54.50	12.40	2.65	13,430	7,461	13,700	7,611	15,120	8,400	
Do.	do.	2.00	36.80	51.90	11.30	3.05	13,430	7,400	13,310	7,394	15,120	8,400	
Do.	do.	1.70	34.00	53.60	12.20	2.70	12,880	7,151	13,120	7,283	14,960	8,311	
Do.	do.	1.80	34.80	53.30	12.20	2.60	12,880	7,151	13,120	7,283	14,960	8,311	
Do.	do.	1.70	34.80	49.20	16.00	2.60	12,340	6,856	12,550	7,072	14,950	8,306	
Do.	do.	2.30	34.40	55.00	10.60	2.40	13,070	7,261	13,370	7,428	14,960	8,311	
Do.	June 3, 1920	1.390	34.40	55.00	10.60	2.40	13,070	7,261	13,370	7,428	14,960	8,311	

TABLE 2.—Analyses of pool coal, *Atlantic shipping ports*—Continued.
POOL NO. 34, RUN-OF-MINE COAL—Continued.

Consignee.	Port of loading.	Pier.	Date.	Tons deliv-ered.	Proximate analyses.										Caloric value, per pound.					
					As re-ceived.	Dry coal.				Sul-phur, per cent.	As received.		Dry coal.		Moisture-free and ash-free.					
						Mois-ture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.		6	7	8	9	10	B. t. u.	Calo-ries.	B. t. u.	Calo-ries.	B. t. u.	Calo-ries.
Switzerland.....	Baltimore, Md.....	Canton Pier.....	June 3, 1920.....	1,390.....	2.40	34.30	56.30	9.40	2.20	7,339	13,210	13,540	7,522	14,940	8,300					
Do.....	do.....	do.....	do.....	1,390.....	2.00	40.10	52.00	7.90	3.55	7,494	13,490	13,770	7,450	14,950	8,306					
Do.....	do.....	do.....	June 10, 1920.....	1,911.....	1.90	36.10	53.00	10.90	3.00	7,322	13,180	13,430	7,463	15,070	8,372					
Do.....	do.....	do.....	do.....	1,911.....	1.80	37.00	52.30	10.70	3.40	7,350	13,230	13,470	7,483	15,090	8,383					
Do.....	do.....	do.....	do.....	1,911.....	1.70	36.60	50.90	12.50	3.75	7,183	13,030	13,150	7,306	15,030	8,350					
Do.....	do.....	do.....	do.....	1,911.....	2.00	37.50	52.90	9.60	3.15	7,483	13,470	13,740	7,633	15,200	8,444					
Do.....	do.....	do.....	June 11, 1920.....	1,483.....	1.46	32.85	50.93	16.22	2.25	7,523	12,523	12,708	7,060	15,168	8,427					
Do.....	do.....	do.....	do.....	1,483.....	1.95	34.80	52.91	12.29	3.22	7,209	12,976	13,234	7,352	15,088	8,382					
Do.....	do.....	do.....	do.....	1,755.....	3.31	33.92	56.34	9.74	1.89	7,304	13,147	13,489	7,494	15,084	8,399					
Do.....	do.....	do.....	do.....	755.....	1.32	37.04	52.46	10.33	3.73	7,395	13,311	13,736	7,631	14,922	8,329					
Do.....	do.....	do.....	June 13, 1920.....	1,679.....	2.08	38.63	52.99	8.38	2.22	7,450	13,451	13,927	7,365	15,072	8,347					
Do.....	do.....	do.....	do.....	1,679.....	1.62	35.31	51.38	13.31	2.55	7,102	13,041	13,341	7,245	15,043	8,357					
Do.....	do.....	do.....	do.....	1,679.....	2.90	34.70	51.67	13.54	3.53	7,003	12,605	12,942	7,190	14,969	8,316					
Do.....	do.....	do.....	do.....	1,187.....	1.87	35.37	52.06	12.57	3.53	7,637	13,085	13,085	7,275	14,978	8,321					
Do.....	do.....	do.....	June 17, 1920.....	1,187.....	2.21	34.64	50.88	13.16	3.51	7,667	12,997	12,963	7,196	14,916	8,314					
Do.....	do.....	do.....	do.....	1,187.....	2.16	35.06	51.08	13.82	3.51	7,684	12,886	12,848	7,082	14,966	8,314					
Do.....	do.....	do.....	do.....	1,677.....	1.08	36.40	53.23	10.37	2.26	7,373	13,571	13,540	7,522	15,107	8,393					
Do.....	do.....	do.....	June 24, 1920.....	1,677.....	2.10	34.40	52.08	13.32	2.53	7,104	12,787	13,063	7,257	15,105	8,392					
Do.....	do.....	do.....	do.....	1,677.....	2.77	34.21	51.41	14.38	2.67	7,434	12,454	12,869	7,116	14,960	8,311					
Do.....	do.....	do.....	do.....	1,677.....	2.89	34.03	51.69	14.28	2.75	7,393	12,393	12,762	7,090	14,888	8,271					
Do.....	do.....	do.....	June 26, 1920.....	3,100.....	2.19	36.06	52.45	11.49	1.87	7,823	13,823	13,111	7,284	14,813	8,229					
Do.....	do.....	do.....	July 1, 1920.....	1,646.....	2.40	35.24	51.63	13.13	2.22	7,708	12,906	13,021	7,234	14,989	8,327					
Do.....	do.....	do.....	do.....	1,646.....	2.30	35.42	52.46	12.12	2.22	7,886	12,886	13,190	7,358	15,009	8,338					
Do.....	do.....	do.....	do.....	1,646.....	1.86	35.36	53.26	11.38	2.48	7,115	12,286	13,363	7,424	15,079	8,317					
Do.....	do.....	do.....	do.....	1,646.....	1.84	34.33	50.59	15.08	2.82	7,479	12,479	12,713	7,063	14,971	8,317					
Do.....	do.....	do.....	Aug. 18, 1920.....	2,963.....	3.60	36.58	51.74	11.68	2.73	7,109	12,797	13,275	7,375	15,031	8,351					
Do.....	do.....	do.....	do.....	1,518.....	1.48	35.28	53.32	11.40	2.14	7,184	13,184	13,382	7,435	15,104	8,391					
Do.....	do.....	do.....	do.....	1,518.....	1.80	34.72	52.34	12.94	2.47	7,183	12,930	13,167	7,315	15,123	8,402					

Do.	do.	do.	1,518	1.86	35.00	52.62	12.38	2.49	12.943	7.191	13.188	7.327	15.051	8.362
Do.	do.	do.	1,894	4.36	35.77	52.07	12.10	3.21	12,910	6,844	12,908	7,171	14,695	8,164
Do.	do.	do.	1,864	3.11	33.38	51.53	13.09	3.60	12,243	6,805	12,642	7,023	14,888	8,271
Do.	do.	do.	1,864	2.79	34.67	53.78	11.55	2.87	12,933	7,188	13,309	7,394	15,047	8,350
Do.	do.	do.	1,864	2.50	34.13	55.68	10.17	2.69	13,003	7,073	13,475	7,197	15,065	8,336
Do.	do.	do.	1,776	1.97	33.57	52.03	13.44	3.41	12,735	6,929	13,691	7,002	14,748	8,369
Do.	do.	do.	1,776	2.30	34.53	52.03	13.44	2.94	12,472	6,429	12,766	6,974	14,569	8,143
Do.	do.	do.	1,776	3.27	37.91	48.20	13.83	3.69	12,443	6,746	12,935	7,186	14,640	8,104
Do.	do.	do.	1,776	4.71	34.94	53.38	11.68	2.39	12,455	6,919	12,935	7,382	14,569	8,265
Do.	do.	do.	2,177	2.42	34.44	49.43	16.13	3.43	12,175	6,764	12,477	6,832	14,577	8,137
Do.	do.	do.	2,177	3.24	37.67	48.99	13.34	3.45	12,338	6,854	12,751	7,084	14,714	8,174
Do.	do.	do.	2,177	3.06	34.03	49.43	16.54	3.04	11,897	6,609	12,273	6,818	14,705	8,169
Average for above 59 analyses, Pool No. 34, Canton Pier, fiscal years 1920 and 1921.														
Switzerland														
Do.	Philadelphia, Pa.	Greenwich Pier	1,881	1.80	34.00	51.00	15.60	3.00	12,540	6,967	12,780	7,100	15,040	8,356
Do.	do.	do.	1,881	1.70	34.10	51.90	14.00	3.00	12,760	7,089	12,980	7,211	15,100	8,389
Do.	do.	do.	1,881	1.80	34.40	52.10	14.80	3.10	12,610	7,006	12,850	7,239	15,080	8,378
Do.	do.	do.	1,881	2.20	34.40	52.20	13.40	3.10	12,740	7,078	13,030	7,239	15,040	8,356
Do.	do.	do.	1,391	1.80	35.40	54.20	10.40	2.85	13,290	7,383	13,530	7,517	15,100	8,389
Do.	do.	do.	1,391	1.60	35.10	55.60	9.30	2.55	13,550	7,528	13,770	7,620	15,190	8,439
Do.	do.	do.	1,391	1.70	35.80	54.40	9.80	2.35	13,410	7,450	13,650	7,583	15,130	8,406
Do.	do.	do.	578	2.17	38.52	52.41	9.07	2.86	13,262	7,368	13,556	7,531	14,908	8,282
Do.	do.	do.	2,697	2.12	38.95	53.64	7.41	2.10	13,699	7,611	13,996	7,776	15,116	8,398
Do.	do.	do.	2,368	3.23	38.01	50.45	11.54	2.04	12,690	7,044	13,103	7,279	14,812	8,229
Do.	do.	do.	2,697	3.03	38.00	50.77	11.23	2.00	12,759	7,088	13,158	7,310	14,823	8,235
Do.	do.	do.	1,936	2.54	33.21	51.60	15.19	3.25	12,464	6,924	12,789	7,105	15,080	8,378
Do.	do.	do.	1,936	2.67	35.59	51.35	13.06	3.41	12,734	7,074	13,083	7,268	15,048	8,360
Do.	do.	do.	1,936	2.99	33.43	49.95	16.62	3.55	12,208	6,782	12,584	6,991	15,092	8,384
Do.	do.	do.	1,839	3.86	32.82	44.89	22.29	2.78	10,959	6,088	11,399	6,333	14,668	8,149
Do.	do.	do.	25,497	2.35	35.43	51.70	12.87	2.81	12,777	7,098	13,084	7,269	15,017	8,343
Average for above 15 analyses, Pool No. 34, Greenwich Pier, fiscal years 1920 and 1921.														
Switzerland														
Do.	Philadelphia, Pa.	Richmond Pier	1,236	1.94	40.17	52.01	7.82	3.83	13,592	7,551	13,862	7,701	15,038	8,354
Do.	do.	do.	1,141	3.53	35.55	55.65	8.50	1.97	13,165	7,314	13,647	7,582	14,915	8,286
Do.	do.	do.	2,408	2.19	40.17	51.44	9.00	2.75	13,412	7,451	13,712	7,618	15,068	8,371
Do.	do.	do.	2,408	2.09	40.68	49.86	9.46	2.79	13,302	7,390	13,586	7,548	15,006	8,337
Do.	do.	do.	2,408	2.02	39.73	51.63	8.64	3.32	13,424	7,458	13,701	7,612	14,997	8,332
Average for above 5 analyses, Pool No. 34, Richmond Pier, fiscal years 1920 and 1921.														

POOL NO. 36, LUMP OVER THREE-FOURTHS-INCH SCREEN.

Switzerland	Baltimore, Md.	Curtis Bay Pier	1,750	1.60	35.30	56.60	8.10	1.45	13,800	7,667	14,020	7,789	15,260	8,478
Holland	do.	do.	1,255	2.20	36.80	54.90	8.30	1.60	13,580	7,544	13,880	7,711	15,130	8,406
Average for above 2 analyses, Pool No. 36, Curtis Bay Pier, fiscal year 1920...														
			3,005	1.90	36.05	55.75	8.20	1.53	13,685	7,603	13,950	7,750	15,196	8,442

TABLE 2.—Analyses of pool coal, Atlantic shipping ports—Continued.
POOL NO. 37, LUMP, OVER THREE-FOURTHS-INCH SCREEN.

Consignee.	Port of loading.	Pier.	Date.	Tons delivered.	Proximate analyses.										Calorific value, per pound.			
					As received.		Dry coal.			As received.		Dry coal.		Moisture-free and ash-free.				
					B. t. u.	Calo-ries.	Volat-ile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sul-phur, per cent.	B. t. u.	Calo-ries.	B. t. u.	Calo-ries.	B. t. u.	Calo-ries.		
6	7	8	9	10	11	12	13	14	15	16								
Switzerland.....	Baltimore, Md.....	Curtis Bay Pier.....	Aug. 15, 1919	1,940	1.60	37.00	51.00	12.00	2.00	13,000	7,272	13,310	7,394	15,120	8,400			
Do.....	do.....	do.....	do.....	1,940	1.70	38.60	54.20	7.20	1.90	13,800	7,667	14,030	7,794	15,120	8,400			
Do.....	do.....	do.....	do.....	1,940	1.80	37.80	54.50	7.70	1.65	13,760	7,644	14,010	7,783	15,180	8,433			
Do.....	do.....	do.....	do.....	1,940	1.60	37.90	54.30	7.80	1.50	13,720	7,622	13,940	7,744	15,120	8,400			
Do.....	do.....	do.....	Aug. 24, 1919	1,545	1.50	37.60	54.80	7.60	2.00	13,850	7,683	14,030	7,794	15,180	8,433			
Do.....	do.....	do.....	do.....	1,545	1.60	37.60	55.40	7.00	1.40	13,950	7,750	14,180	7,878	15,250	8,472			
Do.....	do.....	do.....	do.....	1,545	1.40	38.10	54.50	7.40	2.00	13,850	7,694	14,050	7,806	15,170	8,428			
Do.....	do.....	do.....	do.....	1,545	1.50	38.00	54.40	7.60	1.90	13,790	7,661	14,000	7,778	15,150	8,417			
Do.....	do.....	do.....	Sept. 12, 1919	1,716	1.20	40.70	51.30	8.00	2.10	13,760	7,644	13,930	7,739	15,140	8,411			
Do.....	do.....	do.....	do.....	1,716	1.40	37.50	54.40	8.10	2.05	13,720	7,622	13,910	7,728	15,130	8,406			
Do.....	do.....	do.....	do.....	1,716	1.20	37.30	54.50	8.20	1.80	13,750	7,606	14,250	7,917	15,250	8,472			
Do.....	do.....	do.....	do.....	1,028	1.60	37.20	56.20	6.60	1.15	14,050	7,806	14,500	8,067	15,960	8,383			
Do.....	do.....	do.....	Sept. 19, 1919	1,028	1.50	37.30	53.70	9.00	1.75	13,510	7,506	13,730	7,628	15,080	8,383			
Do.....	do.....	do.....	do.....	1,028	1.60	37.60	52.80	9.60	2.90	13,480	7,489	13,680	7,600	15,130	8,406			
Do.....	do.....	do.....	do.....	1,028	1.50	37.60	54.50	9.10	1.75	13,620	7,567	13,840	7,689	15,220	8,406			
Do.....	do.....	do.....	do.....	1,537	1.70	38.10	53.70	8.20	1.65	13,650	7,583	13,860	7,711	15,120	8,400			
Do.....	do.....	do.....	Oct. 9, 1919	1,537	1.70	38.20	54.00	7.80	1.60	13,710	7,617	13,940	7,744	15,120	8,400			
Do.....	do.....	do.....	do.....	672	1.30	38.30	54.10	7.60	2.20	13,700	7,639	13,940	7,744	15,120	8,400			
Holland.....	do.....	do.....	Oct. 11, 1919	999	1.40	37.50	54.00	7.70	1.50	13,780	7,656	13,970	7,761	15,140	8,411			
Do.....	do.....	do.....	do.....	999	1.40	37.30	54.80	7.90	1.50	13,720	7,622	13,920	7,733	15,100	8,389			
Do.....	do.....	do.....	Oct. 14, 1919	756	1.60	37.10	54.10	8.80	1.75	13,550	7,528	13,770	7,650	15,100	8,389			
Do.....	do.....	do.....	do.....	756	1.50	37.50	53.90	8.50	1.85	13,590	7,550	13,800	7,667	15,100	8,389			
Do.....	do.....	do.....	Oct. 15, 1919	1,754	1.80	37.40	54.90	7.70	1.75	13,760	7,644	14,010	7,783	15,180	8,433			
Do.....	do.....	do.....	do.....	1,754	1.60	38.30	53.50	8.20	2.15	13,720	7,622	13,940	7,744	15,140	8,439			
Do.....	do.....	do.....	do.....	1,754	1.40	36.60	53.60	9.80	2.95	13,560	7,533	13,750	7,639	15,240	8,467			
Do.....	do.....	do.....	Oct. 28, 1919	1,000	1.50	38.20	53.10	8.70	1.65	13,630	7,572	13,840	7,706	15,160	8,422			
Do.....	do.....	do.....	do.....	1,000	1.60	38.50	53.40	8.10	1.65	13,660	7,589	13,870	7,706	15,100	8,389			
Do.....	do.....	do.....	do.....	1,264	1.50	37.50	54.00	8.50	1.75	13,730	7,628	13,930	7,739	15,120	8,400			
Do.....	do.....	do.....	Jan. 5, 1920	1,264	1.50	37.50	54.00	8.50	1.75	13,730	7,628	13,930	7,739	15,120	8,400			

TABLE 2.—Analyses of pool coal, Atlantic shipping ports—Continued.
POOL NO. 39, LUMP, OVER THREE-FOURTHS-INCH SCREEN.

Consignee.	Port of loading.	Pier.	Date.	Tons delivered.	Proximate analyses.							Calorific value, per pound.			
					As received.	Dry coal.			As received.		Dry coal.		Moisture-free and ash-free.		
						Moisture, per cent.	Volatile matter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulphur, per cent.	B. t. u.	Calories.		B. t. u.	Calories.
1	2	8	4	5	6	7	8	9	10	11	12	13	14	15	16
Holland	Baltimore, Md.	Curtis Bay Pier.	Oct. 10, 1919	1,372	1.60	30.90	56.60	12.50	1.15	13,150	7,306	13,360	7,422	15,270	8,483
Do.	do.	do.	do.	1,372	1.50	32.50	55.30	12.20	1.35	13,210	7,339	13,410	7,450	15,280	8,489
Do.	do.	do.	do.	1,372	1.50	32.40	56.40	11.20	1.40	13,400	7,444	13,610	7,561	15,320	8,511
Average for above 3 analyses, Pool No. 39, Curtis Bay Pier, fiscal year 1920				4,116	1.53	31.93	56.10	11.97	1.30	13,254	7,363	13,460	7,478	15,290	8,494
Switzerland	Baltimore, Md.	Canton Pier.	July 26, 1919	1,644	1.70	31.30	57.80	10.90	1.25	13,430	7,461	13,660	7,589	15,340	8,522
Do.	do.	do.	do.	1,644	1.90	31.90	57.50	10.60	1.05	13,410	7,450	13,680	7,600	15,300	8,500
Do.	do.	do.	do.	1,644	1.40	31.80	56.60	11.00	1.30	13,330	7,406	13,520	7,511	15,290	8,494
Do.	do.	do.	do.	1,644	1.30	31.80	57.20	11.00	1.30	13,400	7,444	13,570	7,539	15,250	8,472
Average for above 4 analyses, Pool No. 39, Canton Pier, fiscal year 1920				6,576	1.58	31.70	57.27	11.03	1.23	13,393	7,441	13,608	7,560	15,295	8,497
Switzerland	Philadelphia, Pa.	Greenwich Pier.	Dec. 13, 1920	1,293	2.40	33.52	55.54	10.64	1.75	13,269	7,372	13,595	7,553	15,214	8,452
Do.	do.	do.	Dec. 16, 1920	3,062	1.56	35.47	57.21	7.32	.94	13,873	7,707	14,093	7,829	15,206	8,448
Average for above 2 analyses, Pool No. 39, Greenwich Pier, fiscal year 1921				4,355	1.98	34.65	56.37	8.98	1.35	13,570	7,539	13,844	7,691	15,210	8,450
POOL NO. 40, RUN-OF-MINE COAL.															
Switzerland	Baltimore, Md.	Canton Pier.	June 12, 1920	1,068	4.93	31.47	57.99	10.54	1.25	12,731	7,073	13,392	7,440	14,970	8,317
Do.	do.	do.	do.	1,068	4.70	31.24	57.99	10.77	1.21	12,785	7,103	13,415	7,453	15,034	8,352
Do.	do.	do.	Oct. 26, 1920	910	2.21	30.45	57.52	12.03	2.01	13,094	7,274	13,390	7,439	15,221	8,456
Average for above 3 analyses, Pool No. 40, Canton Pier, fiscal years 1920 and 1921.				3,046	3.95	31.05	57.84	11.11	1.49	12,870	7,150	13,399	7,444	15,074	8,374

Holland.....	Philadelphia, Pa.....	Greenwich Pier.....	Oct. 2, 1920	976	2.48	31.77	55.40	12.83	1.83	12,884	7,158	13,212	7,340	15,157	8,421
Switzerland.....	do.....	do.....	Oct. 5, 1920	2,098	2.52	34.10	53.37	12.53	2.44	12,840	7,133	13,172	7,318	15,039	8,366
Average for above 2 analyses, Pool No. 40, Greenwich Pier, fiscal year 1921.....															
3,074 2.50 32.94 54.38 12.68 2.14 12,862 7,146 13,192 7,329 15,108 8,393															

POOL NO. 41, LUMP AND EGG COAL.

Switzerland.....	Newport News, Va.....	C. & O. Pier.....	Mar. 6, 1920	1,681	2.70	33.40	58.00	8.60	1.35	13,580	7,544	13,950	7,750	15,270	8,483
Do.....	do.....	do.....	do.....	1,681	3.20	32.90	59.60	8.50	1.10	13,540	7,522	13,980	7,767	15,280	8,489
Do.....	do.....	do.....	do.....	1,681	3.40	31.90	58.90	8.20	1.15	13,450	7,472	13,830	7,739	15,170	8,428
Do.....	do.....	do.....	do.....	1,681	4.50	33.30	56.90	9.80	1.25	13,000	7,292	13,610	7,481	15,000	8,383
Do.....	do.....	do.....	Apr. 2, 1920	720	2.30	33.00	54.40	10.60	1.40	13,310	7,339	13,520	7,311	15,120	8,400
Do.....	do.....	do.....	do.....	720	2.30	36.70	54.80	8.60	1.05	13,440	7,367	13,700	7,644	15,060	8,367
Do.....	do.....	do.....	do.....	720	2.70	36.70	53.10	10.20	1.85	13,110	7,283	13,480	7,489	15,010	8,359
Do.....	do.....	do.....	do.....	2,040	1.90	33.00	56.30	7.80	1.10	13,170	7,317	13,480	7,489	14,950	8,306
Do.....	do.....	do.....	do.....	2,040	2.40	33.30	55.10	9.00	1.05	13,630	7,372	13,900	7,522	15,080	8,378
Do.....	do.....	do.....	do.....	2,040	2.30	33.90	55.10	7.00	1.35	13,270	7,372	13,580	7,550	15,030	8,350
Do.....	do.....	do.....	do.....	2,040	2.30	33.30	56.90	7.00	1.80	13,340	7,411	13,600	7,589	15,020	8,344
Do.....	do.....	do.....	Apr. 13, 1920	1,752	2.20	33.50	57.70	6.30	1.20	13,710	7,517	14,200	7,794	15,190	8,439
Do.....	do.....	do.....	do.....	1,752	2.20	35.10	55.30	8.60	1.25	13,890	7,467	13,740	7,633	15,030	8,350
Do.....	do.....	do.....	do.....	1,752	2.20	35.30	56.00	5.50	.70	13,430	7,461	13,730	7,628	15,010	8,339
Do.....	do.....	do.....	do.....	1,752	2.10	36.00	60.10	7.60	.80	13,720	7,622	14,010	7,783	15,160	8,422
Do.....	do.....	do.....	do.....	1,625	2.40	35.60	56.30	8.10	1.50	13,580	7,544	13,870	7,706	15,100	8,389
Do.....	do.....	do.....	do.....	1,625	2.40	36.00	55.20	8.80	1.50	13,500	7,500	13,840	7,689	15,180	8,433
Do.....	do.....	do.....	do.....	1,625	2.20	34.30	55.20	10.50	1.00	13,190	7,328	13,450	7,489	15,060	8,367
Do.....	do.....	do.....	do.....	1,753	2.30	34.90	55.60	9.50	1.13	13,260	7,367	13,580	7,544	15,000	8,333
Do.....	do.....	do.....	do.....	1,753	2.50	33.90	56.10	10.00	1.25	13,210	7,339	13,550	7,528	15,060	8,367
Do.....	do.....	do.....	do.....	1,753	2.30	35.20	57.80	7.90	1.20	13,650	7,383	13,960	7,756	15,010	8,339
Do.....	do.....	do.....	do.....	1,753	2.10	36.00	56.10	9.90	1.00	13,330	7,517	13,820	7,678	15,010	8,339
Do.....	do.....	do.....	May 27, 1920	1,525	2.70	34.20	56.80	9.00	1.05	13,400	7,444	13,770	7,650	15,140	8,411
Do.....	do.....	do.....	do.....	1,525	3.10	34.60	57.50	7.90	.95	13,480	7,489	13,910	7,728	15,100	8,389
Do.....	do.....	do.....	do.....	1,525	2.70	35.20	57.40	7.40	1.20	13,640	7,578	14,020	7,789	15,140	8,411
Do.....	do.....	do.....	do.....	1,525	3.60	35.30	56.10	8.60	1.20	13,270	7,372	13,770	7,650	15,060	8,367
Do.....	do.....	do.....	do.....	1,525	3.60	34.33	55.82	9.85	1.41	13,037	7,243	13,585	7,547	15,069	8,372
Do.....	do.....	do.....	do.....	1,859	4.03	34.62	57.06	8.32	1.24	13,252	7,362	13,802	7,668	15,055	8,364
Do.....	do.....	do.....	do.....	1,859	3.99	34.43	57.78	7.79	1.16	13,261	7,367	13,878	7,710	15,050	8,361
Do.....	do.....	do.....	do.....	1,859	4.44	34.43	57.78	7.79	1.16	13,261	7,367	13,878	7,710	15,050	8,361
Do.....	do.....	do.....	do.....	1,859	4.40	34.81	57.45	7.72	1.15	13,295	7,386	13,907	7,726	15,070	8,372
Do.....	do.....	do.....	do.....	1,859	3.13	34.33	56.45	9.22	1.25	13,190	7,328	13,617	7,565	15,000	8,333
Average for above 32 analyses, Pool No. 41, C. & O. Pier, fiscal year 1920.....															
52,999 2.78 34.84 56.50 8.66 1.11 13,396 7,442 13,779 7,655 15,085 8,331															

TABLE 2.—Analyses of pool coal, Atlantic shipping ports—Continued.
POOL NO. 43, LUMP AND EGG COAL.

Consignee.	Port of loading.	Pier.	Date.	Tons delivered.	Proximate analyses.							Calorific value, per pound.			
					As received.	Dry coal.			As received.		Dry coal.		Moisture-free and ash-free.		
						Moisture, per cent.	Volatiles, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sulfur, per cent.	B. t. u.	Calories.		B. t. u.	Calories.
1	2	8	4	5	6	7	8	9	10	11	12	13	14	15	16
Holland.....	Norfolk, Va.....	Lamberts Point.....	Oct. 27, 1919	402	3.40	34.30	57.20	8.50	0.55	13,260	7,367	13,720	7,622	15,000	8,333
Holland.....	Newport News, Va.....	C. & O. Pier.....	Jan. 3, 1920	1,643	2.00	34.40	58.30	7.30	.80	13,830	7,083	14,110	7,839	15,220	8,456
Do.....	do.....	do.....	Jan. 13, 1920	1,521	1.90	33.90	60.10	6.00	.65	14,110	7,839	14,380	7,994	15,300	8,500
Switzerland.....	do.....	do.....	do.....	1,223	1.80	33.80	59.40	6.80	.85	13,990	7,772	14,250	7,917	15,260	8,494
Do.....	do.....	do.....	Apr. 3, 1920	1,898	2.00	32.80	58.30	8.90	.85	13,610	7,561	13,880	7,711	15,230	8,461
Holland.....	do.....	do.....	Apr. 20, 1920	1,260	2.30	34.00	58.70	7.30	.80	13,730	7,639	14,070	7,817	15,180	8,433
Do.....	do.....	do.....	May 26, 1920	2,260	2.20	34.90	59.00	6.10	.60	14,030	7,794	14,350	7,972	15,280	8,489
Do.....	do.....	do.....	May 29, 1920	872	2.20	34.10	57.40	8.50	1.05	13,530	7,517	13,840	7,689	15,120	8,400
Do.....	do.....	do.....	June 7, 1920	1,931	2.10	34.30	56.50	9.20	1.35	13,430	7,461	13,720	7,622	15,110	8,394
Do.....	do.....	do.....	June 9, 1920	1,017	2.19	34.78	59.41	5.81	.57	14,029	7,694	14,344	7,969	15,229	8,447
Do.....	do.....	do.....	July 4, 1920	1,492	2.54	35.08	58.39	6.53	.71	13,849	7,694	14,211	7,895	15,204	8,447
Do.....	do.....	do.....	July 9, 1920	1,492	2.14	35.58	57.72	6.70	.71	13,837	7,687	14,167	7,871	15,185	8,436
Do.....	do.....	do.....	Aug. 11, 1920	1,146	2.14	35.54	57.87	6.59	.67	13,913	7,729	14,217	7,898	15,219	8,455
Do.....	do.....	do.....	Sept. 17, 1920	15,037	2.14	34.43	58.43	7.14	0.81	13,827	7,682	14,129	7,849	15,215	8,453
Average for above 12 analyses, Pool No. 43, C. & O. Pier, fiscal years 1920 and 1921.				396	2.54	36.09	54.96	8.95	2.51	13,420	7,456	13,770	7,650	15,124	8,402
Holland.....	Baltimore, Md.....	Curtis Bay Pier.....	Aug. 20, 1920	396	2.54	36.09	54.96	8.95	2.51	13,420	7,456	13,770	7,650	15,124	8,402

POOL NO. 44, RUN-OF-MINE COAL.

Switzerland.....	Baltimore, Md.....	Curtis Bay Pier.....	May 21, 1920	1,547	2.90	29.60	54.70	15.70	2.20	12,260	6,811	12,630	7,017	14,980	8,322
Do.....	do.....	do.....	June 12, 1920	1,613	3.39	33.45	54.04	12.51	2.79	12,748	7,082	13,117	7,287	15,117	8,398
Do.....	do.....	do.....	do.....	1,613	3.80	32.90	54.44	12.66	2.88	12,674	7,041	13,174	7,319	15,084	8,380
Do.....	do.....	do.....	do.....	819	3.18	34.82	53.00	12.18	3.15	12,814	7,119	13,235	7,353	15,071	8,373

Switzerland.....	Baltimore, Md.....	Curtis Bay Pier.....	June 27, 1920.....	1,788	2.48	32.47	48.25	10.98	3.69	11,594	6,441	6,411	6,673	14,880	8,987
Do.....	do.....	do.....	do.....	1,788	4.04	33.71	51.22	15.07	3.28	12,344	6,711	6,711	7,025	15,889	8,372
Do.....	do.....	do.....	do.....	1,788	2.23	32.54	52.65	14.89	3.79	12,584	6,980	6,980	7,286	15,431	8,563
Holland.....	do.....	do.....	Aug. 20, 1920.....	2,636	2.23	36.84	51.28	11.88	3.79	12,967	7,204	7,204	7,368	15,401	8,572
Average for above 9 analyses, Pool No. 44, Curtis Bay Pier, fiscal years 1920 and 1921.				15,205	3.35	33.26	52.59	14.15	3.08	12,501	6,945	6,945	7,186	15,066	8,370
Switzerland.....	Philadelphia, Pa.....	Richmond Pier.....	June 13, 1920.....	865	3.04	33.73	53.05	13.22	3.61	12,607	7,004	7,004	7,224	14,983	8,324
Do.....	do.....	do.....	do.....	865	2.93	33.88	53.40	12.72	3.46	12,704	7,058	7,058	7,271	14,983	8,331
Do.....	do.....	do.....	do.....	865	2.50	34.48	52.68	12.84	3.65	12,710	7,061	7,061	7,242	14,966	8,309
Holland.....	do.....	do.....	Aug. 20, 1920.....	1,538	6.12	33.13	55.54	11.33	2.39	12,408	6,893	6,893	7,343	14,966	8,281
Do.....	do.....	do.....	do.....	1,538	5.14	29.76	57.39	12.85	1.47	12,569	6,983	6,983	7,361	15,204	8,447
Average for above 5 analyses, Pool No. 44, Richmond Pier, fiscal years 1920 and 1921.				5,711	3.95	33.00	54.41	12.59	2.92	12,601	7,001	7,001	7,288	15,069	8,338

POOL NO. 51, LUMP, OVER THREE-FOURTHS-INCH SCREEN.

Switzerland.....	Baltimore, Md.....	Curtis Bay Pier.....	Sept. 12, 1919.....	1,295	1.20	36.50	55.20	8.30	2.75	13,810	7,672	7,672	7,767	15,240	8,467
Do.....	do.....	do.....	do.....	1,295	1.20	36.10	56.00	7.90	2.85	13,900	7,722	7,722	7,817	15,280	8,480
Do.....	do.....	do.....	Sept. 25, 1919.....	973	1.20	36.80	56.00	8.20	2.95	13,900	7,867	7,867	7,971	15,210	8,450
Do.....	do.....	do.....	do.....	973	1.20	36.50	55.40	8.10	2.85	13,900	7,722	7,722	7,817	15,210	8,450
Do.....	do.....	do.....	do.....	1,874	1.60	37.80	53.80	8.60	1.85	13,660	7,589	7,589	7,711	15,240	8,467
Do.....	do.....	do.....	Oct. 11, 1919.....	1,672	1.50	37.00	55.10	7.90	2.10	13,810	7,672	7,672	7,783	15,240	8,450
Holland.....	do.....	do.....	do.....	909	1.20	37.00	53.30	8.00	2.65	13,810	7,556	7,556	7,643	15,240	8,467
Do.....	do.....	do.....	Oct. 27, 1919.....	1,754	1.40	37.50	54.50	8.40	2.10	13,910	7,639	7,639	7,783	15,260	8,467
Switzerland.....	do.....	do.....	Oct. 28, 1919.....	1,000	1.50	36.80	54.70	8.00	2.20	13,750	7,614	7,614	7,756	15,240	8,454
Do.....	do.....	do.....	Jan. 6, 1920.....	1,294	1.30	37.80	53.20	7.00	2.59	13,710	7,617	7,617	7,722	15,360	8,553
Holland.....	do.....	do.....	Jan. 10, 1920.....	1,793	1.40	36.80	53.60	8.60	3.09	13,900	7,722	7,722	7,853	15,320	8,511
Do.....	do.....	do.....	do.....	1,793	1.40	37.00	54.40	8.00	3.00	13,980	7,644	7,644	7,767	15,310	8,504
Switzerland.....	do.....	do.....	Jan. 15, 1920.....	808	1.60	36.80	54.50	7.60	3.00	13,930	7,739	7,739	7,850	15,260	8,494
Do.....	do.....	do.....	do.....	808	1.40	37.30	55.10	7.60	3.19	13,630	7,572	7,572	7,661	15,240	8,467
Do.....	do.....	do.....	Mar. 31, 1920.....	933	1.20	37.20	53.10	9.20	3.25	13,690	7,606	7,606	7,706	15,280	8,489
Do.....	do.....	do.....	do.....	933	1.30	37.70	53.10	9.20	3.25	13,690	7,606	7,606	7,706	15,280	8,489
Average for above 16 analyses, Pool No. 51, Curtis Bay Pier, fiscal year 1920.....				19,167	1.41	36.99	54.58	8.43	2.47	13,789	7,661	7,661	7,770	15,214	8,452

POOL NO. 60, LUMP, OVER THREE-FOURTHS-INCH SCREEN.

Switzerland.....	Baltimore, Md.....	Curtis Bay Pier.....	May 6, 1920.....	1,089	2.20	37.30	56.10	6.60	1.50	13,760	7,644	7,644	7,817	15,060	8,367
Do.....	do.....	do.....	do.....	1,089	2.20	36.60	56.90	6.50	1.60	13,780	7,628	7,628	7,800	15,020	8,344
Do.....	do.....	do.....	May 27, 1920.....	1,878	2.30	36.30	57.50	6.20	1.50	13,860	7,700	7,700	7,878	15,110	8,394
Do.....	do.....	do.....	do.....	1,505	2.40	38.40	56.70	4.90	1.55	13,960	7,756	7,756	7,950	15,050	8,361
Holland.....	do.....	do.....	June 6, 1920.....	500	1.80	35.63	52.96	11.51	2.32	13,069	7,261	7,261	7,394	15,040	8,356
Do.....	do.....	do.....	do.....	500	1.99	35.45	55.22	9.35	1.96	13,493	7,496	7,496	7,648	15,164	8,436
Do.....	do.....	do.....	Aug. 2, 1920.....	500	1.99	35.45	55.22	9.35	1.96	13,493	7,496	7,496	7,648	15,164	8,436
Switzerland.....	do.....	do.....	do.....	1,551	2.70	37.20	53.95	8.85	1.71	13,308	7,393	7,393	7,598	15,005	8,336
Do.....	do.....	do.....	Dec. 8, 1920.....	1,551	2.90	37.10	53.73	9.11	1.79	13,228	7,349	7,349	7,568	14,988	8,327
Do.....	do.....	do.....	do.....	1,551	2.90	37.10	53.73	9.11	1.79	13,228	7,349	7,349	7,568	14,988	8,327

TABLE 2.—Analyses of pool coal, Atlantic shipping ports—Continued.
POOL NO. 60, LUMP, OVER THREE-FOURTHS-INCH SCREEN—Continued.

Consignee.	Port of loading.	Pier.	Date.	Tons delivered.	Proximate analyses.						Caloric value, per pound.					
					As received.			Dry coal.			As received.		Dry coal.		Moisture-free and ash-free.	
					Mois- ture, per cent.	Volat- ile mat- ter, per cent.	Fixed carbon, per cent.	Ash, per cent.	Sul- phur, per cent.	Calo- ries.	B. t. u.	Calo- ries.	B. t. u.	Calo- ries.	B. t. u.	
1	2	8	4	5	6	7	8	9	10	11	12	13	14	15	16	
Switzerland.....	Baltimore, Md.....	Curtis Bay Pier.....	Dec. 8, 1920.....	1,551	1.92	38.20	56.36	5.44	1.66	14,003	7,779	14,277	7,932	15,088	8,388	
Do.....	do.....	do.....	Dec. 10, 1920.....	2,562	2.02	37.19	56.96	5.85	1.52	13,926	7,737	14,213	7,896	15,086	8,387	
Do.....	do.....	do.....	Dec. 20, 1920.....	1,494	1.88	36.08	57.54	6.38	1.42	13,983	7,768	14,251	7,917	15,222	8,487	
Do.....	do.....	do.....	.....do.....	1,494	1.94	38.22	55.07	6.71	1.22	13,820	7,678	14,093	7,829	15,107	8,393
Average for above 12 analyses, Pool No. 60, Curtis Bay Pier, fiscal years 1920 and 1921.				16,864	2.19	36.97	55.75	7.28	1.65	13,678	7,599	13,984	7,769	15,082	8,379	
Switzerland.....	Baltimore, Md.....	Canton Pier.....	Jan. 2, 1920.....	1,371	2.00	35.50	54.90	9.60	2.20	13,490	7,494	13,770	7,650	15,230	8,461	
Do.....	do.....	do.....	Apr. 19, 1920.....	1,068	1.70	35.20	55.90	8.90	1.75	13,720	7,622	13,960	7,756	15,320	8,511	
Do.....	do.....	do.....	June 11, 1920.....	869	1.93	35.98	54.06	9.96	2.62	13,306	7,392	13,568	7,588	15,069	8,372	
Do.....	do.....	do.....	June 26, 1920.....	881	3.81	34.42	54.17	11.41	2.91	13,131	7,295	13,651	7,584	15,409	8,561	
Do.....	do.....	do.....	Aug. 18, 1920.....	863	2.86	39.05	51.94	9.01	2.91	13,435	7,464	13,831	7,684	15,200	8,444	
Do.....	do.....	do.....	Dec. 15, 1920.....	1,018	1.73	33.77	58.19	8.04	1.09	13,736	7,631	13,978	7,766	15,200	8,444	
Do.....	do.....	do.....	.....do.....	1,018	1.73	35.52	56.69	7.79	1.01	13,705	7,614	13,946	7,748	15,124	8,402
Average for above 7 analyses, Pool No. 60, Canton Pier, fiscal years 1920 and 1921.				7,058	2.25	35.63	55.13	9.24	2.07	13,504	7,502	13,815	7,675	15,221	8,456	
Switzerland.....	Philadelphia, Pa.....	Greenwich Pier.....	May 31, 1920.....	611	1.70	36.80	55.60	8.10	2.05	13,700	7,611	13,930	7,739	15,170	8,428	
Do.....	do.....	do.....	.....do.....	1,119	2.70	37.30	51.30	10.90	3.95	12,737	7,076	13,080	7,272	14,690	8,161
Holland.....	do.....	do.....	June 3, 1920.....	356	2.98	35.77	59.22	5.01	3.54	14,159	7,866	14,594	8,108	15,363	8,535	
Switzerland.....	do.....	do.....	Aug. 20, 1920.....	1,840	1.84	35.03	57.04	7.93	1.01	13,786	7,659	14,044	7,802	15,254	8,474	
Do.....	do.....	do.....	Dec. 16, 1920.....	2,068	3.20	37.69	54.86	7.45	1.59	13,602	7,557	14,052	7,807	15,183	8,435	
Do.....	do.....	do.....	Dec. 24, 1920.....	2,354	2.65	34.90	57.87	7.23	.97	13,690	7,606	14,063	7,813	15,159	8,422	
Do.....	do.....	do.....	Dec. 23, 1920.....	8,959	2.40	36.33	55.84	7.83	1.74	13,623	7,568	13,958	7,754	15,144	8,413	
Average for above 7 analyses, Pool No. 60, Greenwich Pier, fiscal years 1920 and 1921.				8,959	2.40	36.33	55.84	7.83	1.74	13,623	7,568	13,958	7,754	15,144	8,413	

Switzerland.....	Philadelphia, Pa.....	Richmond Pier.....	Nov. 29, 1920	1,244	2.02	38.27	56.62	5.11	1.13	13,981	7,767	14,269	7,927	15,087	8,354
Do.....	do.....	do.....	Dec. 8, 1920	1,244	2.20	37.63	57.09	5.28	1.08	13,875	7,764	14,303	7,946	15,100	8,389
Do.....	do.....	do.....	Dec. 8, 1920	2,569	2.08	39.05	55.13	5.82	1.53	13,923	7,785	14,214	7,897	15,092	8,384
Do.....	do.....	do.....	Dec. 13, 1920	2,569	2.08	36.10	54.25	6.65	1.58	13,195	7,331	13,475	7,486	14,914	8,286
Do.....	do.....	do.....	Dec. 13, 1920	2,135	1.96	37.61	55.01	6.48	1.28	13,893	7,373	14,171	7,873	15,153	8,418
Do.....	do.....	do.....	Dec. 21, 1920	2,135	1.63	35.92	57.53	6.55	1.11	13,940	7,744	14,171	7,873	15,164	8,424
Do.....	do.....	do.....	Dec. 21, 1920	1,620	2.68	37.81	52.42	9.77	1.70	13,066	7,259	13,426	7,459	14,880	8,267
Average for above 7 analyses, Pool No. 60, Richmond Pier, fiscal year 1921.....				12,916	2.10	37.48	55.57	6.95	1.34	13,710	7,617	14,004	7,780	15,060	8,361

POOL NO. 61, RUN-OF-MINE COAL.

Switzerland.....	Baltimore, Md.....	Curtis Bay Pier.....	May 27, 1920	1,023	2.20	34.80	56.70	8.50	1.25	13,510	7,506	13,820	7,678	15,110	8,394
Do.....	do.....	do.....	June 6, 1920	1,596	2.00	38.40	54.20	7.40	2.05	13,730	7,628	14,000	7,778	15,120	8,400
Do.....	do.....	do.....	Aug. 17, 1920	1,804	2.79	39.69	52.40	7.91	3.34	13,490	7,494	13,877	7,709	15,069	8,372
Do.....	do.....	do.....	Nov. 10, 1920	1,273	3.63	35.77	54.96	9.27	1.58	13,004	7,224	13,494	7,497	14,873	8,263
Average for above 4 analyses, Pool No. 61, Curtis Bay Pier, fiscal years 1920 and 1921.....				4,696	2.66	37.17	54.56	8.27	2.06	13,431	7,462	13,798	7,666	15,042	8,357
Switzerland.....	Baltimore, Md.....	Canton Pier.....	Jan. 2, 1920	1,371	3.70	33.30	57.10	9.60	1.55	13,080	7,267	13,580	7,544	15,030	8,350
Do.....	do.....	do.....	do.....	1,371	2.70	33.80	55.20	11.20	2.00	13,120	7,289	13,480	7,489	15,190	8,439
Do.....	do.....	do.....	do.....	1,371	4.70	33.60	56.00	10.40	1.20	12,680	7,044	13,300	7,389	14,850	8,250
Do.....	do.....	do.....	do.....	1,371	2.40	34.20	55.00	10.80	1.55	13,300	7,388	13,630	7,527	15,280	8,489
Do.....	do.....	do.....	May 23, 1920	1,040	1.90	32.80	55.30	12.70	2.25	12,960	7,200	13,210	7,339	15,140	8,411
Do.....	do.....	do.....	June 26, 1920	1,145	5.07	31.16	57.91	10.93	1.54	13,028	7,238	13,725	7,625	15,408	8,561
Do.....	do.....	do.....	Oct. 26, 1920	1,209	3.14	32.65	55.15	12.20	1.84	12,704	7,058	13,116	7,287	14,938	8,299
Average for above 7 analyses, Pool No. 61, Canton Pier, fiscal years 1920 and 1921.....				8,898	3.37	32.93	55.95	11.12	1.70	12,981	7,212	13,434	7,463	15,115	8,397
Switzerland.....	Philadelphia, Pa.....	Greenwich Pier.....	May 31, 1920	623	2.50	33.20	54.80	12.00	2.00	12,890	7,161	13,220	7,344	15,090	8,350
Do.....	do.....	do.....	July 17, 1920	1,570	2.61	35.71	52.70	11.60	1.76	12,632	7,018	12,971	7,206	14,671	8,151
Do.....	do.....	do.....	Aug. 6, 1920	1,558	2.44	34.22	57.43	8.24	1.81	13,376	7,431	13,853	7,696	15,113	8,396
Holland.....	do.....	do.....	Aug. 20, 1920	2,479	4.31	33.45	56.28	10.54	2.87	12,895	7,163	13,474	7,486	15,061	8,367
Switzerland.....	do.....	do.....	Nov. 13, 1920	900	1.93	36.47	54.32	9.21	2.30	13,431	7,462	13,695	7,608	15,084	8,380
Average for above 5 analyses, Pool No. 61, Greenwich Pier, fiscal years 1920 and 1921.....				7,229	2.96	34.56	55.10	10.34	1.75	13,045	7,247	13,443	7,468	14,993	8,329

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BULLETIN 22. Analysis of coals in the United States, with descriptions of mine and field samples collected between July 1, 1904, and June 30, 1910, by N. W. Lord, with chapters by J. A. Holmes, F. M. Stanton, A. C. Fieldner, and Samuel Sanford. 1912. 1129 pp., 1 fig. 85 cents.

BULLETIN 85. Analyses of mine and car samples of coal collected in the fiscal years 1911 to 1913, by A. C. Fieldner, H. I. Smith, A. H. Fay, and Samuel Sanford. 1914. 444 pp., 2 figs. 45 cents.

BULLETIN 119. Analyses of coals purchased by the Government during the fiscal years 1908-1915, by G. S. Pope. 1916. 118 pp. 15 cents.

BULLETIN 123. Analyses of mine and car samples of coal collected in the fiscal years 1913 to 1916, by Arno C. Fieldner, H. I. Smith, J. W. Paul, and Samuel Sanford. 1918. 456 pp. 50 cents.

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TECHNICAL PAPER 269. Analyses of Iowa coals, by G. S. Rice, A. C. Fieldner, and F. D. Osgood. 1921. 28 pp. 5 cents.

TECHNICAL PAPER 308. Analyses of Kentucky coals. 1922. 92 pp., 1 fig. 10 cents.

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